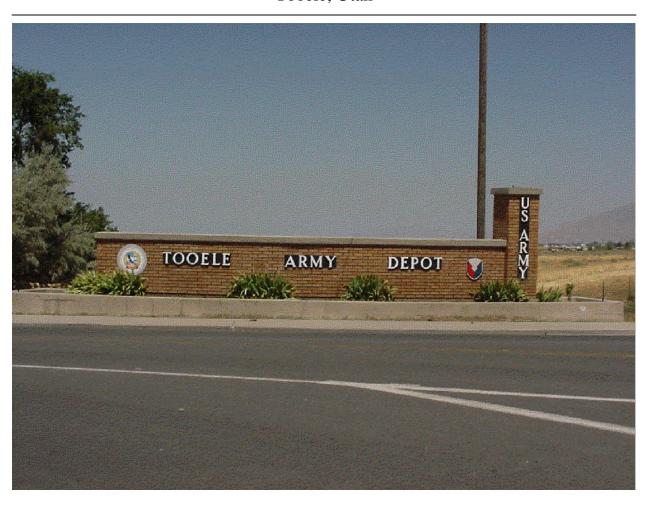
### SEMIANNUAL GROUNDWATER QUALITY REPORT AND VOLUNTARY SWMU SAMPLING FALL 2004

**Tooele Army Depot**Tooele, Utah



### **Draft Final**

Prepared for: Prepared by:



Tooele Army Depot Environmental Office



U.S. Army Corps of Engineers Sacramento District

April 2005

#### VOLUME 2: GROUNDWATER TREATMENT SYSTEM OPERATION AND MAINTAINCE REPORT

#### **FALL 2004**

### TOOELE ARMY DEPOT, UTAH



April 14, 2005

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Injection Well Downtime
Groundwater Treatment Plant Total Gallons Treated
Extraction Well Total Gallons Pumped
Injection Well Total Gallons Injected
Orthophosphate Field Test Results: Effluent

#### LIST OF ACRONYMS

ATV all-terrain vehicle

CESPK U.S. Army Corps of Engineers, Sacramento District

GWTP Groundwater Treatment Plant

IWL Industrial Waste Lagoon

MWH Americas, Inc.

NOT Non-Operation Test

O&M operation and maintenance

PRAC Pre-placed Remedial Action Contract

RCRA Resource Conservation and Recovery Act

SOW scope of work

SWMU Solid Waste Management Unit

TEAD Tooele Army Depot

USHWCB Utah Solid and Hazardous Waste Control Board

VFD variable frequency drive

#### 1.0 INTRODUCTION

**1.0.0.1.** This report presents a summary of operation and maintenance (O&M) activities performed during the period of 1 July 2004 through 4 January 2005 at the Tooele Army Depot (TEAD) Solid Waste Management Unit (SWMU) 2/Industrial Waste Lagoon (IWL) Groundwater Treatment Plant (GWTP) by Veolia Water North American Operating Services, Inc (Veolia) with oversight and program management by MWH Americas, Inc. (MWH). The work summarized in this report was performed pursuant to the U.S. Army Corps of Engineers, Sacramento District (CESPK), Scope of Work (SOW) dated 5 September 2003 (revised 6 August 2004), and was performed under the Pre-placed Remedial Action Contract (PRAC) No. DACA05-99-D-0012, Task Order No. CM22.

#### 1.1 BACKGROUND

**1.1.0.1.** The Utah Solid and Hazardous Waste Control Board (USHWCB) has issued TEAD a Resource Conservation and Recovery Act (RCRA) Post Closure Permit for post-closure and corrective action of the IWL and other SWMUs, hereafter referred to as the Permit (USHWCB, 2001). The O&M activities described in this summary report were conducted in accordance with Attachment Number 8 (The Preventative Maintenance Schedule) of the Permit.

#### 1.2 SCOPE OF OPERATION AND MAINTENANCE ACTIVITIES

#### **1.2.0.1.** The operation activities include the following tasks:

- Operations and monitoring of the GWTP and extraction well shutdown during the System Non-Operation Test (System NOT)
- Operation and monitoring of two air stripping towers and associated instrumentation

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- Operation and monitoring of three air stripping tower feed pumps (i.e., P-1, P-2, and P-3) and associated instrumentation
- Operation and monitoring of one recycle pump (i.e., P-4) and associated instrumentation
- Operation and monitoring of 16 extraction wells [i.e., E-01, -02-1, -02-2, -03-1, -03-2, -04, -05, -06, -08, -09, -10, -11, -12, -13, -14, and -15] and associated instrumentation
- Operation and monitoring of 13 injection wells (i.e., I-1 through I-13) and associated instrumentation
- Operation and monitoring of all piping associated with the GWTP.

#### **1.2.0.2.** The maintenance activities included the following tasks:

- Daily, weekly, monthly, quarterly, and annual preventative maintenance
- Corrective maintenance of all treatment equipment, piping, and instrumentation.

#### 1.3 DOCUMENT ORGANIZATION

#### **1.3.0.1.** The remainder of this report consists of:

- Section 2.0 System Non-Operation Test Summary. Describes the System NOT and the procedures followed at the GWTP
- Section 3.0 Groundwater Treatment Plant Operation. Presents a summary
  of the O&M activities conducted during the reporting period. Included as part
  of this section are tables detailing downtime for the plant, the extraction wells,
  and the injection wells, and total volumes of groundwater pumped from each

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extraction well, treated at the GWTP, and injected at the individual injection wells.

- Section 4.0 Health and Safety. Presents a brief summary of health and safety issues for the reporting period.
- Appendix A Weekly Extraction Well Monitoring
- Appendix B Weekly Injection Well Monitoring

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#### 2.0 SYSTEM NON-OPERATION TEST SUMMARY

**2.0.0.1.** The System NOT was designed to assess how the GWTP controls the groundwater plume by limiting the spatial extent of the plume and reducing the levels of contamination. The System NOT included short term monitoring of groundwater rebound as a result of the shut-down of the extraction wells, which occurred in two phases. Phase I was conducted between 22 June 2004 and 6 August 2004 and Phase II was conducted between 10 August 2004 and 24 September 2004. Over the longer term, contaminant concentrations will be monitored for statistically significant changes. Details of the System Non-Operation Test are available in the *Final System Non-Operation Test Proposal, Implementation of Alternative Measures, Industrial Waste Lagoon* (URS, 2003) and in the *SWMU 2/Industrial Waste Lagoon System Non-Operation Test Monitoring and Installation-Wide Groundwater Monitoring Plans* (MWH, 2004a). The CESPK is currently evaluating the results of the ongoing System NOT.

**2.0.0.2.** Phase I included the shut down of five extraction wells that are screened in the bedrock (i.e., E-04, -05, -08, -09 and -10) and water level elevations were monitored in these extraction wells and in 44 monitoring wells for a period of 45 days as the aquifer rebounded. Phase II consisted of the shut down of 10 extraction wells screened in alluvium (i.e., E-01, -02-1, -02-2, -03-1, -03-2, -06, -11, -13, -14, and -15). Water level rebound was monitored for a period of 45 days in these extraction wells, the Phase I extraction wells, and in 34 monitoring wells. In addition, manual measurements were collected weekly from 22 monitoring wells. During both phases, water level elevations were measured with downhole transducers/dataloggers (i.e., In-Situ Inc miniTROLLs<sup>TM</sup> and TROLLS<sup>TM</sup>) in the extraction wells and in the associated monitoring wells and piezometers. During the second phase of the shutdown test, water elevations were measured manually using an electric water-level indicator at select monitoring wells and piezometers to supplement the data collected using the downhole transducers/dataloggers.

**2.0.0.3.** During Phase I of the System NOT, the GWTP operated at a reduced capacity to treat the water produced by the extraction wells screened in the alluvium that continued

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to operate. During Phase II of the System NOT, the GWTP operated in recirculation mode to prevent fouling of the packing material in the air stripping towers. Because of loss of water due to evaporation and leakage to the injection wells that takes place during recirculation mode, replacement water was required for continuation of plant operation in recirculation mode. Therefore, prior to the completion of Phase II of the System NOT extraction well E-13 was pumped to obtain replacement water. Approximately 6,000 gallons were pumped on 13 September and again on 20 September. In addition, E-13 was pumped periodically during the remainder of the reporting period. Extraction well E-13 was chosen as the source of replacement water by representatives of CESPK as it was determined that E-13 would have the least impact on the System NOT. The GWTP will continue to operate in recirculation mode and extraction well E-13 will continue to be the source for replacement water.

TEAD SWMU 2/IWL Contractor: MWH 3.0 GROUNDWATER TREATMENT PLANT OPERATIONS

**3.0.0.1.** During the time period of 1 July 2004 to 1 January 2005, over 240 million

gallons of contaminated groundwater was treated at the GWTP. More than 24 billion

gallons of contaminated groundwater have been treated at the GWTP since the inception

of GWTP operations in 1993. During this reporting period the treatment plant has

recorded approximately 2,000 hours of down time, the majority of which is a result of the

System NOT. During the reporting period, the extraction and injection well system has

been operating within its design parameters.

**3.0.0.2.** The GWTP is operated by staff from Veolia with oversight by MWH. Veolia

personnel are Steve Kubacki project manager, Jeff Hanmann, and Mark Baer. MWH

personnel include Dave Imlay O&M supervisor, Chris Goodrich O&M Manager and

Mike Gronseth Technical Team Leader for the O&M and MWH Task Order Manager.

Correspondence was maintained with Larry McFarland and Carl Cole of the TEAD

environmental management group. Monthly O&M reports were prepared by Veolia and

submitted to CESPK.

**3.0.0.3.** Veolia maintained records of daily events and pertinent operational data in a

bound logbook and on daily process control sheets. In addition, monitoring and

inspection logbooks were used to compile pertinent operational data such as: water

levels, volume of water pumped, instantaneous flow rates, average flow rates, pressure

gauge reading and time for the GWTP including data on the extraction and injection

wells. Process control data sheets were developed to compile operational data including

surge tank level, instantaneous flow, total flow, pump discharge pressure, stripper wet

level, air flow, air blower, discharge pressure, and air temperature. All documentation is

available for review at the GWTP.

**3.0.0.4.** GWTP, extraction well, and injection well downtime is summarized in

Tables 3-1 through 3-3, respectively. Total gallons processed at the GWTP and total

gallons pumped at extraction well and at injection wells are presented in Tables 3-4

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Contractor: MWH

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through 3-6, respectively. Orthophosphate monitoring from the GWTP effluent is summarized in Table 3-7.

**3.0.0.5.** Because of the System NOT, the groundwater treatment plant operated in recirculation mode for most of the reporting period and will continue to do so for the remainder of the System NOT, projected until 2007. Periodic pumping of the extraction wells and exercise of the GWTP equipment was conducted during the System NOT. Seven extraction wells (i.e., E-3-1, 3-2, -4, -5, -6, -8, and -10) were pumped between September 27 and October 1, 2004. The remaining extraction wells (i.e., E-1, -2-1, -2-2, -11, -13, -14, and -15) were pumped between November 8 and 12, 2004. Please note the pumping conducted in late September was not conducted as per the original schedule, which called for equipment exercise to be conducted 90 days after the start of the Phase I shutdown. Rather, the pumping was delayed approximately one week in order to synchronize equipment exercise with quarterly and semi-annual groundwater sampling events. In addition to the periodic pumping of the Phase I and II extraction wells, extraction well E-13 was pumped several times during the reporting period in order to obtain replacement water for the GWTP. Due to evaporation and leakage that occurs during recirculation mode, replacement water was necessary to maintain a water supply for recirculation.

#### 3.1 GWTP, EXTRACTION, AND INJECTION WELL DOWNTIME

**3.1.0.1. Groundwater Treatment Plant Downtime.** During the six month time period between 1 July 2004 and 4 January 2005, the GWTP was down for 1,966 hours. The majority of the plant downtime (approximately 1,960 hours) was associated with the System NOT. The remaining downtime resulted from power outages and power fluctuations. A summary of GWTP downtime is summarized in Table 3-1.

**3.1.0.2. Extraction Well Downtime.** A summary of the extraction well downtime for the reporting period is summarized in Table 3-2. The majority of extraction well downtime was due to the System NOT. Other causes of extraction well downtime included power outages, power fluctuations, and preventative/corrective maintenance

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activities. It should be noted that extraction well E-12 is off-line except during sampling events because it is located beyond the leading edge of the groundwater plume and extraction well E-9 has been off-line for all of this reporting period. In late 2002, during installation of the internal cathodic protection system in extraction well E-9 the casing and screen were discovered to be corroded (i.e., breaks and holes were noted at several depths). Discussions between the USACE and Veolia in 2003 resulted in the decision to delay repair on extraction well E-9 pending results of the System NOT.

**3.1.0.3. Injection Well Downtime.** Injection well downtime for the reporting period is summarized in Table 3-3. The majority of injection well downtime was due to the System NOT. Other causes of injection well downtime included power outages, power fluctuations, and preventative/corrective maintenance activities.

#### 3.2 GWTP, EXTRACTION WELL, AND INJECTION WELL FLOW

**3.2.0.1. GWTP Flow.** The GWTP is equipped with two flow meters and totalizers accurate to  $\pm$  2.0%. The GWTP processed approximately 239 million gallons of contaminated groundwater during the reporting period. A summary of GWTP flow is presented in Table 3-4.

**3.2.0.2. Extraction Well Flow.** The extraction wells are monitored weekly for water level, total flow, well pumping pressure, date and time. Each extraction well is equipped with a flow meter and totalizer accurate to  $\pm$  2.0%. The total gallons pumped and the average flow for the week are calculated and recorded. The extraction wells produced approximately 234 million gallons during this reporting period. A summary of the extraction well flow is presented in Table 3-5 and weekly extraction well monitoring data are presented in Appendix A.

**3.2.0.3. Injection Well Flow.** The injection wells are monitored weekly for water level, total flow, well pumping pressure, date and time. Each injection well is equipped with a flow meter and totalizer accurate to  $\pm$  2.0%. The total gallons injected and the average flow for the week are calculated and recorded. The injection wells accepted approximately 231 million gallons during this reporting period. A summary of the

extraction well flow is presented in Table 3-6 and weekly extraction well monitoring data

are presented in Appendix B.

**3.2.0.4.** The discrepancy in total gallons pumped (approximately 234 million gallons),

treated (approximately 239 million gallons), and injected (approximately 231 million

gallons) during the reporting period results from several factors including; the accuracy

 $(\pm 2\%)$  of the flow meters (16 extraction well, 13 injection well and two located at the

treatment plant) and water loss due to leakage and evaporation.

3.3 OPERATION AND MAINTENANCE ACTIVITIES

**3.3.0.1.** During this reporting period, O&M activities included preventative and

corrective maintenance on equipment and structures, including pumps, motors,

instrumentation, flow-meters, electrical equipment, power lines, valves and associated

piping. Personnel maintained records of all maintenance in bound notebooks and

presented summaries in monthly summary reports. In addition to the preventative and

corrective maintenance, daily, weekly, monthly, semi-annual, and annual checklists were

completed, which are available for review at the GWTP.

3.3.1 Preventative Maintenance

**3.3.1.1.** Preventative maintenance activities were followed at the GWTP as outlined in

the Preventative Maintenance Schedule. In addition, periodic inspections and

observations of the IWL were documented. There were no unusual observations

recorded or observed. The following preventative maintenance activities were performed

and recorded on a regular basis.

3.3.1.2. Daily Preventative Maintenance.

• Stripper feeder pumps: pump in operation, pump run hours, check mechanical

seals for leaks, check valves and associated pipes for leaks, check seal water

flush, and record pump bearing and motor temperature

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Contractor: MWH

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 Hydro pneumatic system: check pressure, check operation for abnormal noise or vibration, and check water level in reservoir

• Containment basins: visual check for water, check surge tank, stripping

towers, valves, and piping for leaks, check operation of sump pumps, check

for debris, and check for frozen water in cold weather

• Plant alarm system: verify dry contact operation, verify auto dialer operation,

and check emergency lighting.

**3.3.1.3.** Weekly Preventative Maintenance.

• IWL patrol: security fence integrity, wildlife preserve, and unusual odors

• Stripper feeder pumps: pump in operation, check for abnormal noise or

vibration, check for mechanical seal leaks, and general visual check

• Stripper air blowers: blower in operation, check belts for wear and tension,

check filters for obstructions, and check for abnormal noise or vibration

• Truck and all-terrain vehicle (ATV) inspection: general maintenance

• Extraction wells: check well vaults for wildlife, leaks in piping,

instrumentation operation, secured cover, unusual odors, foreign debris,

electrical panels, SCADA antenna, electrical lines and conduit, and wet spots

Injection wells: check well vaults for wildlife, leaks in piping,

instrumentation operation, secured cover, unusual odors, foreign debris,

electrical panels, SCADA antenna, electrical lines and conduit, and wet spots.

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**3.3.1.4.** Monthly Preventative Maintenance.

• IWL patrol: abnormal erosion, cover settlement, and vegetation cover

• Stripper feeder pumps: switch off line pump to on line (each tower), record

run hours, check mechanical seals for leaks, check seal water, check valves

and associated piping for leaks, record bearing temperatures, and lubricate

bearings

• Stripper air blowers: switch off line blower to on line (each tower), check off

line blower belts for tension, wear, and alignment, and record run hours

• Check on line blower for abnormal noise and vibration, record bearing

temperature, and lubricate bearings

• Extraction well VFD cabinets: check for abnormal noise and vibration, check

air conditioning filters for debris, and check cabinet for condensation.

3.3.1.5. Quarterly Preventative Maintenance.

• IWL patrol: check security fence, wildlife, unusual odors, erosion, cover

settlement, vegetation cover, cover drainage, and run on and run off

• Stripper feeder pumps: observe and record amp draws (each line)

• Stripper air blowers: observe and record amp draws (each line)

• Extraction well motors: observe and record amp draws (each line).

3.3.1.6. Annual Preventative Maintenance.

• IWL patrol: check security fence, wildlife, unusual odors, erosion, cover

settlement, vegetation cover, cover drainage, and run on and run off

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• Stripper feeder pumps: observe and record amp draws (each line), megger

motor leads (if indicated), and lubricate motor leads (if indicated)

• Stripper air blowers: observe and record amp draws (each line), megger

motor leads (if indicated), and lubricate motor leads (if indicated)

• Stripping towers: observe packing condition.

3.3.2 Corrective Maintenance

**3.3.2.1.** Corrective maintenance consists of major and minor non-routine maintenance.

During this reporting period, corrective maintenance was performed on equipment at

monitoring, extraction, and injection wells, and on equipment at the GWTP. O&M

activities that took place at monitoring, extraction, and injection wells are summarized in

Section 3.3.3. This is followed by a summary of O&M activities at transfer and

recirculation pumps, blowers, storage tanks, stripper tower, and the plant facility in

Section 3.3.4.

3.3.3 Monitoring, Extraction, and Injection Well O&M Activities

3.3.3.1. O&M Activities at Monitoring Wells.

• N-139-90: Peterson Well Service videotaped the monitoring well

• N-149-97: Peterson Well Service videotaped the monitoring well.

3.3.3.2. O&M activities at Extraction Wells.

• All wells: flow-meter calibration checks; winterization of variable frequency

drives

• E-1: sanding, cleaning, and priming of the variable frequency drive (VFD)

enclosure; installation of new confined space entry sign on well vault

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• E-2-1: sanding, cleaning, priming, and painting of the VFD enclosure; installation of new circuit board in the VFD; installation of desiccant bags in flow-meter; repaired pressure switch conduit

• E-2-2: replacement of flow-meter transmitter card; sanding, cleaning, priming, and painting of the VFD enclosure; installation of desiccant bags in flow-meter

E-3-1: Nickerson Company installed a new motor, rebuilt pump, and piping;
 Replacement of the display/keypad on the VFD; installation of new confined space entry sign on well vault

• E-3-2: none

• E-4: none

• E-5: re-attachment of loose insulation in well vault; installation of desiccant bags in flow-meter

• E-6: installation of new confined space entry sign on well vault

• E-8: none

• E-9: taken off-line for corrective maintenance

• E-10: none

• E-11: installation of new confined space entry sign on well vault

• E-12: installation of new confined space entry sign on well vault

• E-13: none

• E-14: Nickerson Company removed existing the motor, pump, and piping and installed a new motor, rebuilt pump, and piping; replacement and

motaned a new motor, result pump, and piping, replacement and

programming of a transistor cable and current transmitter in the VFD;

replacement and programming of the control board in the VFD

• E-15: repaired low-level conduit.

3.3.3.3. O&M Activities at Injection Wells.

• All wells: flow-meter calibration

• I-1: installation of new confined space entry sign on well vault

• I-2: installation of new confined space entry sign on well vault

• I-3: none

• I-4: none

• I-5: none

• I-6: installation of new confined space entry sign on well vault

• I-7: installation of desiccant bags in flow-meter

I-8: none

• I-9: installation of new confined space entry sign on well vault; installation of

desiccant bags in flow-meter

• I-10: installation of new confined space entry sign on well vault

• I-11: none

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• I-12: none

• I-13: re-attachment of loose insulation in well vault

3.3.4 Transfer and Recirculation Pumps, Blowers, Storage Tanks, Stripper Tower,

and Plant Facility O&M

3.3.4.1. Transfer Pumps.

• P-1: vibration testing performed by IBC; installation and testing of transfer

pump interlocks by ECT; cleaned and lubricated discharge valve; installed

new packing gland bolts on discharge valves; painted discharge isolation

valve

• P-2: vibration testing performed by IBC; installation and testing of transfer

pump interlocks by ECT: cleaned and lubricated discharge and suction valves;

painted discharge isolation valve; installed new packing gland bolts on

discharge isolation valve

• P-3: vibration testing performed by IBC; installation and testing of transfer

pump interlocks by ECT; cleaned and lubricated suction and discharge valves;

installed new packing gland bolts on discharge valves; painted discharge

isolation valve; painted intake isolation valve; installed new packing gland

bolts on intake isolation valve.

3.3.4.2. Recirculation Pumps

• P-4: vibration testing performed by IBC; lubrication and pump testing;

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cleaned and lubricated discharge valve.

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3.3.4.3. Blowers.

• B-1: vibration testing performed by IBC; removed, cleaned and stored filter

• B-2: vibration testing performed by IBC; removed, cleaned and stored filter

• B-3: vibration testing performed by IBC; removed, cleaned and stored filter.

3.3.4.4. Storage Tanks and Stripper.

• Surge Tank: installation of containment sump heater

• Stripper: installation of stripper containment sump heater; energized and

tested the stripper containment area heat tracing and the stripper level

indicator heater; annual inspection of towers.

**3.3.4.5. Plant Facility and Roadways.** General operation and maintenance performed

at the GWTP included electrical lighting repair, painting of the facility, and site

maintenance (i.e., snow removal, road repair, mowing, trimming, etc.).

3.4 SAMPLING ACTIVITIES

**3.4.0.1. Groundwater Sampling.** Sampling activities are discussed in the SWMU

2/Industrial Waste Lagoon Groundwater Treatment Plant Influent, Effluent, and

Extraction Well Sampling Quarterly Report (MWH, 2004b).

**3.4.0.2.** Ortho-phosphate Sampling. Orthophosphate field samples were collected

weekly from the GWTP effluent. Sample results are summarized in Table 3-7.

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TABLE 3-1
GROUNDWATER TREATMENT PLANT DOWNTIME

Time Period in 2004	Total Downtime (hours)	Reason
July	5	Power Fluctuations
August	473	Power Fluctuations and System NOT
September	650	Power Fluctuations and System NOT
October	662	Power Fluctuations and System NOT
November	164	Power Fluctuations and System NOT
December	14	Power Fluctuations and System NOT
Total	1,966	

NOT Non-Operation Test

TABLE 3-2
EXTRACTION WELL DOWNTIME

Extraction Well	Total Downtime (hours)	Power Fluctuation (hours)	Maintenance* (hours)	System NOT (hours)
E-1	3,463	34	15	3,413
E-2-1	3,450	26	94	3,330
E-2-2	3,457	22	35	3,401
E-3-1	3,778	31	337	3,410
E-3-2	3,445	33	2	3,410
E-4	4,420	73	0	4,347
E-5	4,415	73	0	4,342
E-6	3,449	28	12	3,409
E-8	4,421	73	110	4,239
E-9				
E-10	4,416	73	0	4,343
E-11	3,443	30	1	3,412
E-12				
E-13	3,425	30	1	3,394
E-14	3,986	26	550	3,410
E-15	3,441	30	1	3,409
	53,010	583	1,158	51,269

NOT Non-Operation Test

-- off-line

\* preventative and corrective maintenance

TABLE 3-3
INJECTION WELL DOWNTIME

Injection Well	Total Downtime (hours)	Power Fluctuation (hours)	Maintenance*	System NOT (hours)
I-1	3,337	36	1	3,300
I-2	3,337	36	1	3,300
I-3	3,337	36	1	3,300
I-4	3,337	36	1	3,300
I-5	3,337	36	1	3,300
I-6	3,337	36	1	3,300
I-7	3,337	36	1	3,300
I-8	3,337	36	1	3,300
I-9	3,337	36	1	3,300
I-10	3,337	36	1	3,300
I-11	3,337	36	1	3,300
I-12	3,337	36	1	3,300
I-13	3,337	36	1	3,300
	43,383	464	16	42,903

hrs hours

NOT Non-Operation Test

\* preventative and corrective maintenance

TABLE 3-4
GROUNDWATER TREATMENT PLANT
TOTAL GALLONS TREATED

Date	Total Flow (gallons)
July 5, 2004	34,063,124
July 12, 2004	33,325,689
July 19, 2004	35,374,351
July 26, 2004	38,216,121
August 4, 2004	51,747,764
August 9, 2004	28,308,334
October 4, 2004	8,621,801
November 15, 2004	9,458,620
Total Gallons Treated	239,115,804

TABLE 3-5
EXTRACTION WELL TOTAL GALLONS PUMPED

Extraction Well	July (gallons)	August (gallons)	September (gallons)	October (gallons)	November (gallons)	December (gallons)	Total (gallons)
E-1	12,898,000	6,197,000	0	0	609,000	0	19,704,000
E-2-1	9,750,000	4,843,000	0	0	599,000	0	15,192,000
E-2-2	17,320,000	9,010,000	0	0	733,000	0	27,063,000
E-3-1	4,684,000	5,074,000	402,000	105,000	0	0	10,265,000
E-3-2	14,618,000	7,471,000	674,000	134,000	0	0	22,897,000
E-4	0	0	273,000	89,000	0	0	362,000
E-5	0	0	558,000	145,000	0	0	703,000
E-6	10,954,000	5,421,000	466,000	136,000	0	0	16,977,000
E-8	0	0	580,000	167,000	0	0	747,000
E-9	0	0	0	0	0	0	0
E-10	0	0	562,000	162,000	0	0	724,000
E-11	22,160,000	11,263,000	0	0	594,000	0	34,017,000
E-12	0	3,000	0	0	7,000	0	10,000
E-13	23,262,000	11,620,000	18,000	6,000	704,000	98,000	35,708,000
E-14	2,647,000	9,113,000	0	0	634,000	0	12,394,000
E-15	23,878,000	12,272,000	0	0	769,000	0	36,919,000
	142,171,000	82,287,000	3,533,000	944,000	4,649,000	98,000	233,682,000

TABLE 3-6
INJECTION WELL TOTAL GALLONS INJECTED

Extraction Well	July (gallons)	August (gallons)	September (gallons)	October (gallons)	November (gallons)	December (gallons)	Total (gallons)
I-1	0	0	0	0	0	0	0
I-2	0	0	0	0	0	0	0
I-3	15,072,000	8,077,000	0	0	0	0	23,149,000
I-4	14,231,000	7,525,000	0	0	0	0	21,756,000
I-5	21,674,000	11,448,000	126,000	6,000	11,000	0	33,265,000
I-6	10,345,000	5,436,000	493,000	100,000	650,000	0	17,024,000
I-7	30,237,000	18,398,000	465,000	102,000	636,000	0	49,838,000
I-8	14,939,000	7,864,000	7,000	3,000	21,000	0	22,834,000
I-9	13,281,000	10,025,000	700,000	159,000	973,000	0	25,138,000
I-10	19,122,000	10,525,000	2,064,000	412,000	2,416,000	0	34,539,000
I-11	1,765,000	1,898,000	0	0	0	0	3,663,000
I-12	0	0	0	0	0	0	0
I-13	0	0	0	0	0	0	0
	140,666,000	81,196,000	3,855,000	782,000	4,707,000	0	231,206,000

ORTHOPHOSPHATE
FIELD TEST RESULTS: EFFLUENT

**TABLE 3-7** 

	Test M	lethod		Test M	lethod
Date	Hach (mg/l)	Chemetric (mg/l)	Date	Hach (mg/l)	Chemetric (mg/l)
5-Jul-04	4	0.15	4-Oct-04	19	1
7-Jul-04	4	0.15	6-Oct-04	20	1
9-Jul-04	4	0.15	8-Oct-04	21	1
12-Jul-04	4	0.15	11-Oct-04	20	1
16-Jul-04	4	0.15	13-Oct-04	23	1
19-Jul-04	4	0.15	15-Oct-04	22	1
21-Jul-04	4	0.15	18-Oct-04	24	1
23-Jul-04	4	0.15	20-Oct-04	24	1
26-Jul-04	4	0.15	22-Oct-04	26	1
28-Jul-04	4	0.15	25-Oct-04	27	1
30-Jul-04	4	0.15	27-Oct-04	25	1
2-Aug-04	no sample	no sample	29-Oct-04	27	1
4-Aug-04	4	0.15	1-Nov-04	29	1
6-Aug-04	4	0.15	3-Nov-04	29	1
9-Aug-04	4	0.15	5-Nov-04	26	1
11-Aug-04	30	> 1.0	8-Nov-04	18	1
13-Aug-04	29	> 1.0	10-Nov-04	14	0.45
16-Aug-04	30	> 1.0	12-Nov-04	12	no sample
18-Aug-04	29	> 1.0	15-Nov-04	21	no sample
20-Aug-04	24	2	17-Nov-04	25	no sample
23-Aug-04	28	> 1.0	19-Nov-04	26	1
25-Aug-04	27	> 1.0	22-Nov-04	27	1
27-Aug-04	25	> 1.0	24-Nov-04	27	1
30-Aug-04	no sample	no sample	29-Nov-04	30	1
1-Sep-04	28	2	1-Dec-04	30	1
3-Sep-04	27	2	3-Dec-04	23	1
7-Sep-04	27	2	6-Dec-04	28	1
8-Sep-04	27	2	8-Dec-04	26	1
10-Sep-04	28	2	10-Dec-04	27	1
13-Sep-04	27	2	13-Dec-04	29	1
15-Sep-04	25	2	15-Dec-04	25	1
17-Sep-04	29	2	17-Dec-04	26	1
20-Sep-04	28	1	20-Dec-04	27	1
22-Sep-04	29	2	22-Dec-04	25	1
24-Sep-04	30	1	27-Dec-04	28	1
27-Sep-04	16	1	29-Dec-04	24	1
29-Sep-04	14	0.7	3-Jan-05	26	1
1-Oct-04	12	0.4			

mg/l milligram per liter

#### 4.0 HEALTH AND SAFETY

**4.0.0.1. Personnel Training.** All personnel working onsite are required to have documentation of training fulfilling the requirements of OSHA 29 CFR 1910 129(e) (3). Eight-hour refresher is required for each employee per year. In addition, all personnel are required to read the Site Safety and Health Plan. TEAD also requires personnel to attend the annual hazardous waste management course. In addition, employees are given annual physical exams. During the reporting period, Veolia covered the following monthly

training topics:

• Power tool safety and site specific contingency plan

• Working and walking surfaces, ladder safety, and fall protection

Confined space entry policies and procedures

• Preventing back injuries/strains and sprains

• Powered industrial lift truck operation/safety and cold stress

• Slip, trips, falls, and site specific chemical handling procedures

• The hazard communication standard

**4.0.0.2.** Lost Time Injuries. No lost time injuries occurred during the reporting period.

TEAD SWMU 2/IWL

#### REFERENCES

- MWH Americas, Inc., 2004a. *Tooele Army Depot, SWMU 2/Industrial Waste Lagoon System Non-Operation Test Monitoring and Installation-Wide Groundwater Monitoring Plans*. Prepared for the U.S. Army Corps of Engineers Sacramento District. Final, June 2004.
- MWH Americas, Inc., 2004b. *Draft SWMU 2/Industrial Waste Lagoon Groundwater Treatment Plant Influent, Effluent, and Extraction Well Sampling Quarterly Report.* Prepared for the U.S. Army Corps of Engineers Sacramento District. Draft, September 2004.
- URS, 2003. Final System Non-Operation Test Proposal, Implementation of Alternative Measures, Industrial Waste Lagoon. Prepared for the U.S. Army Corps of Engineers Sacramento District. Final, October 2003.

SWMU 2/IWL

### APPENDIX A

# WEEKLY EXTRACTION WELL MONITORING

**Weeks of 7 July 2004 – 4 January 2005** 

## EXTRACTION WELL WEEKLY MONITORING JULY 07, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
E-1	15:06	340	240.65	1,678,271,000	3,470,000	342	70	168	3
E-2-1	14:49	290	262.20	770,826,000	2,617,000	256	47	168	3
E-2-2	14:42	460	258.32	2,071,815,000	4,422,000	447	46	511	3
E-3-1	13:57	0	271.23	1,528,510,000	. 0	0	0	10392	3
E-3-2	14:01	400	303.05	1,517,214,000	3,978,000	388	30	147	3
E-4	13:07	0		1,575,310,000	0	0	0	10373	***
E-5	13:45	0		3,256,373,000	0	0	0	10365	***
E-6	13:31	290	276.97	2,065,074,000	2,947,000	286	0	85	3
E- 8	13:41	0		920,417,000	0	0	0	10400	***
E-9	13:51	0		2,209,542,000	0	0	0	10397	3
E-10	13:48	0		3,068,980,000	0	0	0	10396	***
E-11	15:16	630	194.69	2,162,918,000	5,890,000	573	82	76	3
E-12	15:39	0	145.89	164,183,000	0	0	0	0	
E-13	14:16	640	281.45	2,348,441,000	6,293,000	610	42	75	3
E-14	14:32	0	278.25	2,027,100,000	0	0	0	10359	3
E-15	14:58	640	226.90	2,419,811,000	6,420,000	622	71	74	3

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR NON-OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

## EXTRACTION WELL WEEKLY MONITORING JULY 14, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
E-1	11:29	340	240.85	1,681,543,000	3,272,000	339	70	216	1
E-2-1	10:01	280	262.47	773,271,000	2,445,000	255	47	217	1
E-2-2	9:53	480	258.24	2,076,188,000	4,373,000	452	46	114	1
E-3-1	9:18	0		1,528,510,000	. 0	0	0	9801	3
E-3-2	9:20	410	304.00	1,520,901,000	3,687,000	384	30	195	1
E-4	12:02	0		1,575,310,000	0	0	0	10015	***
E-5	12:06	0		3,256,373,000	0	0	0	9981	***
"E-6	12:13	290	276.84	2,067,856,000	2,782,000	281	0	105	1
E- 8	12:09	0		920,417,000	0	0	0	9988	***
E-9	11:43	0		2,209,542,000	0	0	0	9952	3
E-10	11:41	0		3,068,980,000	0	0	0	9953	***
E-11	11:18	650	195.94	2,168,534,000	5,616,000	577	82	105	1
E-12	10:39	0	146.96	164,183,000	0	0	0		
E-13	9:41	640	281.48	2,354,303,000	5,862,000	604	41	105	1
E-14	9:32	0	278.55	2,027,100,000	0	0	0	9780	3
E-15	10:15	640	226.84	2,425,788,000	5,977,000	619	71	142	1

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

## EXTRACTION WELL WEEKLY MONITORING JULY 22, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
E-1	11:09	340	240.28	1,685,318,000	3,775,000	334	70	194	1
E-2-1	10:50	290	262.32	776,150,000	2,879,000	254	48	222	1
E-2-2	10:43	480	258.42	2,081,432,000	5,244,000	457	46	87	1
E-3-1	10:19	270	288.96	1,531,370,000	2,860,000	252	32	217	1
E-3-2	10:26	400	303.72	1,525,180,000	4,279,000	376	30	194	1
E-4	9:51	0		1,575,310,000	0	0	0	11389	***
E-5	10:07	0		3,256,373,000	0	0	0	11401	***
E-6	9:55	290	277.40	2,071,023,000	3,167,000	280	0	89	1
E- 8	10:03	0		920,417,000	0	0	0	11394	***
E-9	10:12	0		2,209,542,000	0	0	0	11429	3
E-10	10:10	0		3,068,980,000	0	0	0	11429	***
E-11	11:20	600	196.00	2,175,099,000	6,565,000	574	82	80	1
E-12	11:53	0	146.22	164,183,000	0	0	0	0	TO STATE TO
E-13	10:32	630	281.40	2,361,201,000	6,898,000	601	44	88	1
E-14	10:39	0		2,027,100,000	0	0	0	11587	3
E-15	11:00	630	226.86	2,432,865,000	7,077,000	617	72	88	1

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

### EXTRACTION WELL WEEKLY MONITORING JULY 27, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
E-1	12:05	340	239.27	1,687,699,000	2,381,000	328	70	0	
E-2-1	10:11	290	263.10	777,959,000	1,809,000	253	48	0	
E-2-2	10:04	460	260.14	2,084,713,000	3,281,000	458	46	0	
E-3-1	9:28	260	289.15	1,533,194,000	1,824,000	255	32	0	
E-3-2	9:21	400	303.43	1,527,854,000	2,674,000	375	30	0	
E-4	12:31	0		1,575,310,000	0	0	0	7360	***
E-5	12:24	0		3,256,373,000	0	0	0	7337	***
E-6	12:35	290	277.54	2,073,081,000	2,058,000	280	0	0	
E- 8	12:27	0		920,417,000	0	0	0	7344	***
E-9	12:21	0		2,209,542,000	0	0	0	7329	3
E-10	12:18	0		3,068,980,000	0	0	0	7328	***
E-11	11:57	630	196.03	2,179,197,000	4,098,000	566	82	0	
E-12	10:56	0	146.90	164,183,000	0	0	0	0	
E-13	9:54	630	281.13	2,365,410,000	4,209,000	588	45	0	
E-14	9:42	500	314.88	2,029,747,000	2,647,000	449	30	1253	3
E-15	10:20	640	227.70	2,437,269,000	4,404,000	615	71	0	

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

## EXTRACTION WELL WEEKLY MONITORING AUGUST 06, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
E-1	11:40	340	****	1,692,140,000	4,441,000	326	70	752	3
E-2-1	11:19	290	****	781,472,000	3,513,000	243	48	0	
E-2-2	11:10	470	****	2,091,309,000	6,596,000	471	46	473	3
E-3-1	10:26	260	****	1,536,876,000	3,682,000	255	32	0	
E-3-2	10:32	390	****	1,533,268,000	5,414,000	374	30	0	
E-4	10:09	0	****	1,575,310,000	0	0	0	14255	***
E-5	9:45	0	****	3,256,373,000	0	0	0	14241	***
E-6	9:27	290	****	2,076,869,000	3,788,000	278	0	609	3
E- 8	9:38	0	****	920,417,000	0	0	0	14231	***
E-9	9:59	0	****	2,209,542,000	0	0	0	14258	3
E-10	9:52	0	****	3,068,980,000	0	0	0	14254	***
E-11	12:15	640	****	2,187,378,000	8,181,000	567	82	0	***************************************
, E-12	12:22	0	147.20	164,186,000	3,000	0	0	0	***************************************
E-13	11:00	620	****	2,373,834,000	8,424,000	582	45	0	
E-14	10:47	480	****	2,036,309,000	6,562,000	454	30	21	3
E-15	10:29	640	****	2,446,175,000	8,906,000	618	71	0	

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*\*\*</sup> TRANDUCER'S IN E-WELL

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

#### EXTRACTION WELL WEEKLY MONITORING AUGUST 12, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
E-1	12:29	0	****	1,693,896,000	1,756,000	326	74	3296	1,***
E-2-1	12:10	0	****	782,802,000	1,330,000	251	40	3392	1,3,***
E-2-2	12:13	0	****	2,093,723,000	2,414,000	448	38	3310	1,3,***
E-3-1	11:43	0	****	1,538,268,000	1,392,000	253	32	3220	1,***
E-3-2	11:45	0	****	1,535,325,000	2,057,000	375	30	3222	1,***
E-4	11:15	0	****	1,575,310,000	0	0	0	8706	1,***
E-5	11:29	0	****	3,256,373,000	0	0	0	8744	1,***
E-6	11:19	0	****	2,078,502,000	1,633,000	284	0	3012	1,***
E- 8	11:25	0	****	920,417,000	0	0	0	8747	1,***
E-9	11:35	0	****	2,209,542,000	0	0	0	8736	3
E-10	11:32	0	****	3,068,980,000	0	0	0	8740	1,***
E-11	13:03	0	****	2,190,460,000	3,082,000	566	0	3240	1,***
E-12	13:09	0	148.15	164,186,000	0	0	0	0	
E-13	12:05	0	****	2,377,030,000	3,196,000	579	14	3182	1,***
E-14	11:55	0	****	2,038,860,000	2,551,000	461	0	3170	1,***
E-15	12:18	0	****	2,449,541,000	3,366,000	606	0	3194	1,***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*\*\*</sup> TRANDUCER'S IN E-WELL

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

#### **EXTRACTION WELL WEEKLY MONITORING AUGUST 17, 2004**

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOMANTIME**	REASON DOWN
E-1	12:52	0	****	1,693,896,000	0	0	72	7223	***
E-2-1	14:25	0	****	782,802,000	0	0	40	7335	***
E-2-2	14:28	0	****	2,093,723,000	0	0	36	7335	***
E-3-1	14:50	0	****	1,538,268,000	0	0	31	7387	***
E-3-2	14:48	0	****	1,535,325,000	0	0	30	7383	***
E-4	12:25	0	****	1,575,310,000	0	0	0	7363	***
E-5	12:36	0	****	3,256,373,000	0	0	0	7267	***
E-6	12:28	0	****	2,078,502,000	0	0	0	7269	***
E- 8	12:34	0	****	920,417,000	0	0	0		***
E-9	12:42	0	***	2,209,542,000	0	0	0	7269	
E-10	12:39	0	****	3,068,980,000	0	0	0	7267	***
E-11	12:55	0	***	2,190,460,000	0	0	0	7267	
E-12	13:06	0	148.47	164,186,000	0	0		7192	***
E-13	14:33	0	****	2,377,030,000	0	0	10	72.40	
E-14	14:40	0	****	2,038,860,000	0	0		7348	***
E-15	14:20	0	****	2,449,541,000	0	0	0	7365 7322	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*\*\*</sup> TRANDUCER'S IN E-WELL

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

#### EXTRACTION WELL WEEKLY MONITORING AUGUST 24, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
E-1	10:51	0	****	1,693,896,000	0	0	73	9959	***
E-2-1	13:39	0	****	782,802,000	0	0	38	10034	***
E-2-2	13:42	0	****	2,093,723,000	0	0	36	10034	***
E-3-1	14:04	0	****	1,538,268,000	0	0	32	10034	***
E-3-2	14:07	0	****	1,535,325,000	0	0	30	10039	***
E-4	9:59	0	****	1,575,310,000	0	0	0	9934	***
E-5	10:21	0	****	3,256,373,000	0	0	0	10017	***
E-6	10:06	0	****	2,078,502,000	0	0	0	9938	***
E- 8	10:16	0	****	920,417,000	0	0	0	9942	***
E-9	10:34	0	****	2,209,542,000	0	0	0	9952	3
E-10	10:28	0	****	3,068,980,000	0	0	0	9949	***
E-11	10:59	0	****	2,190,460,000	0	0	0	9964	***
E-12	11:10	0	148.00	164,186,000	0	0	0	0	
E-13	13:47	0	****	2,377,030,000	0	0	0	10034	***
E-14	13:55	0	****	2,038,860,000	0	0	0	10035	***
E-15	13:33	0	****	2,449,541,000	0	0	0	10033	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>\*\*\*\*</sup> TRANDUCER'S IN E-WELL

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

## EXTRACTION WELL WEEKLY MONITORING SEPTEMBER 3, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
E-1	15:29	0	****	1,693,896,000	0	0	0	14678	***
E-2-1	15:22	0	****	782,802,000	0	0	0	14503	***
E-2-2	15:20	0	****	2,093,723,000	0	0	0	14498	***
E-3-1	14:59	0	****	1,538,268,000	0	0	0	14455	***
E-3-2	15:01	0	****	1,535,325,000	0	0	0	14454	***
E-4	14:33	0	****	1,575,310,000	0	0	0	14674	***
E-5	14:48	0	****	3,256,373,000	0	0	0	14667	***
E-6	14:38	0	****	2,078,502,000	0	0	0	14672	***
E- 8	14:44	0	****	920,417,000	0	0	0	14668	***
E-9	14:56	0	****	2,209,542,000	0	0	0	14662	3
E-10	14:53	0	****	3,068,980,000	0	0	0	14453	***
E-11	15:36	0	****	2,190,460,000	0	0	0	14677	***
E-12	16:35	0	147.87	164,186,000	· O	0	0	0	
E-13	15:05	0	****	2,377,030,000	0	0	0	14478	***
E-14	15:10	0	****	2,038,860,000	0	0	0	14475	***
E-15	15:25	0	****	2,449,541,000	0	0	0	14512	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>\*\*\*\*</sup> TRANDUCER'S IN E-WELL

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

### EXTRACTION WELL WEEKLY MONITORING SEPTEMBER 8, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
E-1	12:17	0	****	1,693,896,000	0	0	0	7008	***
E-2-1	13:38	0	****	782,802,000	0	0	0	7096	***
E-2-2	13:41	0	****	2,093,723,000	0	0	0	7101	***
E-3-1	14:07	0	****	1,538,268,000	0	0	0	7148	***
E-3-2	14:04	0	****	1,535,325,000	0	0	0	7143	***
E-4	10:57	0	****	1,575,310,000	0	0	0	6984	***
E-5	11:16	0	****	3,256,373,000	0	0	0	6988	***
E-6	11:01	0	****	2,078,502,000	0	0	0	6983	***
E- 8	11:13	0	****	920,417,000	0	0	0	6989	***
E-9	12:03	0	****	2,209,542,000	0	0	0	7027	3
E-10	12:06	0	****	3,068,980,000	0	0	0	7033	***
E-11	13:16	0	****	2,190,460,000	0	0	0	7060	***
E-12	12:23	0	147.91	164,186,000	0	0	0	0	
E-13	13:47	0	****	2,377,036,000	6,000	100	0	7062	***
E-14	13:56	0	****	2,038,860,000	0	0	0	7126	***
E-15	13:34	0	****	2,449,541,000	0	0	0	7089	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>\*\*\*\*</sup> TRANDUCER'S IN E-WELL

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

#### EXTRACTION WELL WEEKLY MONITORING SEPTEMBER 14, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
E-1	10:36	0	****	1,693,896,000	0	0	0	8539	***
E-2-1	10:28	0	****	782,802,000	0	0	0	8450	***
E-2-2	10:26	0	****	2,093,723,000	0	0	0	8445	***
E-3-1	9:58	0	****	1,538,268,000	0	0	0	8391	***
E-3-2	10:00	0	****	1,535,325,000	0	0	0	8396	***
E-4	9:30	0	***	1,575,310,000	0	0	0	8553	***
E-5	9:43	0	****	3,256,373,000	0	0	0	8457	***
E-6	9:34	0	****	2,078,502,000	0	0	0	8553	***
E- 8	9:40	0	****	920,417,000	0	0	0	8547	***
E-9	9:50	0	****	2,209,542,000	0	0	0	8507	3
E-10	9:48	0	****	3,068,980,000	0	0	0	8514	***
E-11	10:44	0	****	2,190,460,000	0	0	0	8504	***
E-12	11:11	0	148.20	164,186,000	0	0	0		
E-13	10:04	0	****	2,377,042,000	6,000	100	0	8357	***
E-14	10:14	0	****	2,038,860,000	0	0	0	8464	***
E-15	10:31	0	****	2,449,541,000	0	0	0	8457	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>\*\*\*\*</sup> TRANDUCER'S IN E-WELL

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

## EXTRACTION WELL WEEKLY MONITORING SEPTEMBER 23, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
E-1	11:21	0	****	1,693,896,000	0	0	0	13005	***
E-2-1	13:40	0	****	782,802,000	0	0	0	13152	***
E-2-2	13:37	0	****	2,093,723,000	0	0	0	13151	***
E-3-1	13:34	0	****	1,538,268,000	0	0	0	13176	***
E-3-2	13:32	0	****	1,535,325,000	0	0	0	13172	***
E-4	10:44	0	****	1,575,310,000	0	0	0	13034	***
E-5	10:55	0	****	3,256,373,000	0	0	0	13032	***
E-6	10:48	0	****	2,078,502,000	0	0	0	13034	***
E- 8	10:52	0	****	920,417,000	0	0	0	13032	***
E-9	11:02	0	****	2,209,542,000	0	0	0	13039	3
E-10	11:07	0	****	3,068,980,000	0	0	0	13039	***
E-11	11:24	0	****	2,190,460,000	0	0	0	13000	***
E-12	11:29	0	147.87	164,186,000	0	0	0		
E-13	13:28	0	****	2,377,048,000	6,000	100	0	13104	***
E-14	13:24	0	****	2,038,860,000	0	0	0	13150	***
E-15	12:35	0	****	2,449,541,000	0	0	0	13084	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>\*\*\*\*</sup> TRANDUCER'S IN E-WELL

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

## EXTRACTION WELL WEEKLY MONITORING SEPTEMBER 30, 2004

WELL	TIME	GPM	*1 =\/=1	CALLONOTORIUM	•				
	LHVIE	OFW	LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
E-1	18:00	0	****	1,693,896,000	0	0	0	10479	***
E-2-1	13:44	0	****	782,802,000	0	0	0	10084	***
E-2-2	13:41	0	****	2,093,723,000	0	0	0	10084	***
E-3-1	13:27	100	****	1,538,670,000	402,000	89	32	5565	***
E-3-2	13:29	100	****	1,535,999,000	674,000	150	30	5578	***
E-4	11:44	100	****	1,575,583,000	273,000	61	0	5653	***
E-5	11:56	100	****	3,256,931,000	558,000	125	0	5672	***
E-6	11:39	100	****	2,078,968,000	466,000	104	0	5669	***
E- 8	11:50	110	****	920,997,000	580,000	132	0	5731	3,***
E-9	12:06	0	****	2,209,542,000	0	0	0	10144	
E-10	12:02	110	****	3,069,542,000	562,000	126	0	5692	***
E-11	17:50	0	****	2,190,460,000	0	0	0	10466	***
E-12	16:52	0	147.79	164,186,000	0	0	0	0	
E-13	13:20	0	****	2,377,048,000	0	0	0	10072	***
E-14	13:11	0	****	2,038,860,000	0	0	0	10072	***
E-15	13:51	0	****	2,449,541,000	0	0	0	10156	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>\*\*\*\*</sup> TRANDUCER'S IN E-WELL

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

#### EXTRACTION WELL WEEKLY MONITORING OCTOBER 6, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
E-1	12:22	0	****	1,693,896,000	0	0	0	8302	***
E-2-1	13:48	0	****	782,802,000	0	0	0	8644	***
E-2-2	13:49	0	****	2,093,723,000	0	0	0	8648	***
E-3-1	14:08	0	****	1,538,775,000	105,000	84	0	7429	***
E-3-2	14:10	0	****	1,536,133,000	134,000	106	0	7420	***
E-4	11:49	0	****	1,575,672,000	89,000	70	0	7372	***
E-5	12:01	0	****	3,257,076,000	145,000	100	0	7190	***
E-6	11:54	0	****	2,079,104,000	136,000	105	0	7357	***
E- 8	11:58	0	****	921,164,000	167,000	139	0	7446	3,***
E-9	12:08	0	****	2,209,542,000	0	0	0	8642	3
E-10	12:05	0	****	3,069,704,000	162,000	123	0	7326	***
E-11	13:39	0	****	2,190,460,000	0	0	0	8389	***
E-12	14:42	0	148.23	164,186,000	0	0	0	0	
E-13	13:53	0	****	2,377,048,000	0	0	0	8673	***
E-14	14:00	0	****	2,038,860,000	0	0	0	8689	***
E-15	13:45	0	****	2,449,541,000	0	0	0	8634	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>\*\*\*\*</sup> TRANDUCER'S IN E-WELL

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

### EXTRACTION WELL WEEKLY MONITORING OCTOBER 12, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
E-1	12:06	0	****	1,693,896,000	0	0	0	8624	***
E-2-1	11:53	0	****	782,802,000	0	0	0	8525	***
E-2-2	11:51	0	****	2,093,723,000	0	0	0	8522	***
E-3-1	11:24	0	****	1,538,775,000	0	0	0	8476	***
E-3-2	11:26	0	****	1,536,133,000	0	0	0	8476	***
E-4	10:50	0	****	1,575,672,000	0	0	0	8581	***
E-5	11:07	0	****	3,257,076,000	0	0	0	8586	***
E-6	10:56	0	****	2,079,104,000	0	0	0	8582	***
E- 8	11:03	0	****	921,164,000	0	0	0	8585	***
E-9	11:17	0	****	2,209,542,000	0	0	0	8589	3
E-10	11:13	0	****	3,069,704,000	0	0	0	8588	***
E-11	12:13	0	****	2,190,460,000	0	0	0	8554	***
E-12	12:37	0	148.30	164,186,000	0	0	0	0	
E-13	11:31	0	****	2,377,048,000	0	0	0	8498	***
E-14	11:40	0	****	2,038,860,000	0	0	0	8500	***
E-15	11:58	0	****	2,449,541,000	0	0	0	8533	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>\*\*\*\*</sup> TRANDUCER'S IN E-WELL

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

#### **EXTRACTION WELL WEEKLY MONITORING**OCTOBER 20, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
E-1	13:14	0	****	1,693,896,000	0	0	0	11588	***
E-2-1	13:57	0	****	782,802,000	0	0	0	11644	***
E-2-2	14:00	0	****	2,093,723,000	0	0	0	11649	***
E-3-1	11:37	0	****	1,538,775,000	0	0	0	11533	***
E-3-2	11:40	0	****	1,536,133,000	0	0	0	11534	***
E-4	11:03	0	****	1,575,672,000	0	0	0	11533	***
E-5	11:14	0	****	3,257,076,000	0	0	0	11527	***
E-6	10:56	0	****	2,079,104,000	0	0	0	11520	***
E- 8	11:09	0	****	921,164,000	0	0	0	11526	***
E-9	11:25	0	****	2,209,542,000	0	0	0	11528	3
E-10	11:20	0	****	3,069,704,000	0	0	0	11527	***
E-11	13:56	0	****	2,190,460,000	0	0	0	11567	***
E-12	14:55	0	147.98	164,186,000	0	0	0	0	7,4,100
E-13	11:58	0	****	2,377,048,000	0	0	0	11547	***
E-14	11:51	0	****	2,038,860,000	0	0	0	11531	***
E-15	13:53	0	****	2,449,541,000	0	0	0	11635	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>\*\*\*\*</sup> TRANDUCER'S IN E-WELL

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

#### EXTRACTION WELL WEEKLY MONITORING OCTOBER 26, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
E-1	12:20	0	****	1,693,896,000	0	0	0	8586	***
E-2-1	12:10	0	****	782,802,000	0	0	0	8533	***
E-2-2	12:08	0	****	2,093,723,000	0	0	0	8528	***
E-3-1	11:40	0	****	1,538,775,000	0	0	0	8643	***
E-3-2	11:43	0	****	1,536,133,000	0	0	0	8643	***
E-4	11:02	0	****	1,575,672,000	0	0	0	8639	***
E-5	11:23	0	****	3,257,076,000	0	0	0	8649	***
E-6	11:07	0	****	2,079,104,000	0	0	0	8651	***
E- 8	11:19	0	****	921,164,000	0	0	0	8650	***
E-9	11:32	0	****	2,209,542,000	0	0	0	8647	3
E-10	11:27	0	****	3,069,704,000	0	0	0	8647	***
E-11	12:28	0	****	2,190,460,000	0	0	0	8582	***
E-12	14:50	0	148.16	164,186,000	0	0	0	0	
E-13	11:48	0	****	2,377,054,000	6,000	214	0	8602	***
E-14	11:58	0	****	2,038,860,000	0	0	0	8647	***
E-15	12:15	0	****	2,449,541,000	0	0	0	8542	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>\*\*\*\*</sup> TRANDUCER'S IN E-WELLS

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

### EXTRACTION WELL WEEKLY MONITORING NOVEMBER 2, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
E-1	10:53	0	****	1,693,896,000	0	0	0	9993	***
E-2-1	10:42	0	****	782,802,000	0	0	0	9992	***
E-2-2	10:39	0	****	2,093,723,000	0	0	0	9991	***
E-3-1	10:14	0	****	1,538,775,000	0	0	0	9994	***
E-3-2	10:16	0	****	1,536,133,000	0	0	0	9993	***
E-4	9:45	0	****	1,575,672,000	0	0	0	10003	***
E-5	9:55	0	****	3,257,076,000	0	0	0	9992	***
E-6	9:38	0	****	2,079,104,000	0	0	0	9991	***
E- 8	9:50	0	****	921,164,000	0	0	0	9991	***
E-9	10:04	0	****	2,209,542,000	0	0	0	9992	3
E-10	10:00	0	****	3,069,704,000	0	0	0	9993	***
E-11	11:32	0	****	2,190,460,000	0	0	0	10024	***
E-12	11:39	0	147.38	164,186,000	0	0	0	0	
E-13	10:34	0	****	2,377,054,000	0	0	0	10006	***
E-14	10:26	0	****	2,038,860,000	0	0	0	9988	***
E-15	10:47	0	****	2,449,541,000	0	0	0	9992	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>\*\*\*\*</sup> TRANDUCER'S IN E-WELLS

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

#### EXTRACTION WELL WEEKLY MONITORING NOVEMBER 9, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
E-1	12:16	100	****	1,694,052,000	156,000	105	52	8682	***
E-2-1	11:55	110	****	782,956,000	154,000	105	38	8691	3,***
E-2-2	11:52	110	****	2,093,913,000	190,000	125	38	8635	***
E-3-1	11:32	0	****	1,538,775,000	0	0	0	10158	***
E-3-2	11:30	0	****	1,536,133,000	0	0	0	10154	***
E-4	10:51	0	****	1,575,672,000	0	0	0	10146	***
E-5	11:00	0	****	3,257,076,000	0	0	0	10145	***
E-6	10:47	0	****	2,079,104,000	0	0	0	10149	***
E- 8	10:56	0	****	921,164,000	0	0	0	10146	***
E-9	11:06	0	****	2,209,542,000	0	0	0	10142	3
E-10	11:03	0	****	3,069,704,000	0	0	0	10143	***
E-11	13:04	130	****	2,190,621,000	161,000	106	56	8654	***
E-12	13:11	0	148.05	164,186,000	0	0	0	0	***
E-13	11:47	100	****	2,377,228,000	174,000	112	26	8603	***
E-14	11:41	100	****	2,039,022,000	162,000	105	22	8614	***
E-15	12:00	140	****	2,449,727,000	186,000	126	48	8672	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>\*\*\*\*</sup> TRANDUCER'S IN E-WELLS

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

#### EXTRACTION WELL WEEKLY MONITORING NOVEMBER 15, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
E-1	13:08	0	****	1,694,505,000	453,000	106	0	4413	***
E-2-1	11:55	0	****	783,401,000	445,000	105	0	4391	***
E-2-2	11:53	0	****	2,094,456,000	543,000	128	0	4399	***
E-3-1	11:25	0	****	1,538,775,000	0	0	0	8633	***
E-3-2	11:27	0	****	1,536,133,000	0	0	0	8637	***
E-4	10:56	0	****	1,575,672,000	0	0	0	8645	***
E-5	11:12	0	****	3,257,076,000	0	0	0	8652	***
E-6	10:51	0	****	2,079,104,000	0	0	0	8644	***
E- 8	11:16	0	****	921,164,000	0	0	0	8660	***
E-9	11:07	0	****	2,209,542,000	0	0	0	8641	3
E-10	11:04	0	****	3,069,704,000	0	0	0	8641	***
E-11	13:29	0	****	2,191,054,000	433,000	102	0	4423	***
E-12	13:35	0	148.30	164,193,000	7,000	1	0	0	
ͺE-13	11:48	0	****	2,377,752,000	524,000	124	0	4404	***
E-14	11:37	0	****	2,039,494,000	472,000	112	0	4417	***
E-15	12:08	0	****	2,450,310,000	583,000	136	0	4369	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>\*\*\*\*</sup> TRANDUCER'S IN E-WELLS

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

## EXTRACTION WELL WEEKLY MONITORING NOVEMBER 23, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
E-1	12:40	0	****	1,694,505,000	0	0	0	11492	***
E-2-1	11:33	0	****	783,401,000	0	0	0	11498	***
E-2-2	11:27	0	****	2,094,456,000	0	0	0	11494	***
E-3-1	10:40	0	****	1,538,775,000	0	0	0	11475	***
E-3-2	10:44	0	****	1,536,133,000	0	0	0	11477	***
E-4	9:53	0	****	1,575,672,000	0	0	0	11457	***
E-5	10:09	0	****	3,257,076,000	0	0	0	11457	***
E-6	9:44	0	****	2,079,104,000	0	0	0	11453	***
E- 8	10:00	0	****	921,164,000	0	0	0	11444	***
E-9	10:22	0	****	2,209,542,000	0	0	0	11475	3
E-10	10:16	0	****	3,069,704,000	0	0	0	11472	***
E-11	13:07	0	****	2,191,054,000	0	0	0	11498	***
E-12	13:14	0	148.30	164,193,000	0	0	0	0	
E-13	11:17	0	****	2,377,752,000	0	0	0	11489	***
E-14	11:04	0	****	2,039,494,000	0	0	0	11487	***
E-15	11:41	0	****	2,450,310,000	0	0	0	11493	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>\*\*\*\*</sup> TRANDUCER'S IN E-WELLS

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

#### EXTRACTION WELL WEEKLY MONITORING NOVEMBER 30, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
E-1	12:42	0	****	1,694,505,000	0	0	0	10082	***
E-2-1	12:53	0	****	783,401,000	0	0	0	10160	***
E-2-2	12:55	0	****	2,094,456,000	0	0	0	10168	***
E-3-1	13:16	0	****	1,538,775,000	0	0	0	10236	***
E-3-2	13:19	0	****	1,536,133,000	0	0	0	10235	***
E-4	14:08	0	****	1,575,672,000	0	0	0	10335	***
E-5	14:25	0	****	3,257,076,000	0	0	0	10319	***
E-6	10:27	0	****	2,079,104,000	0	0	0	10123	***
E- 8	14:13	0	****	921,164,000	0	0	0	10333	***
E-9	14:21	0	****	2,209,542,000	0	0	0	10319	3
E-10	14:18	0	****	3,069,704,000	0	0	0	10322	***
E-11	12:34	0	****	2,191,054,000	0	0	0	10047	***
E-12	12:07	0	148.28	164,193,000	0	0	0	0	maxwaya
E-13	12:59	0	****	2,377,758,000	6,000	107	0	10126	***
E-14	13:07	0	****	2,039,494,000	0	0	0	10203	***
E-15	12:48	0	****	2,450,310,000	0	0	0	10147	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>\*\*\*\*</sup> TRANDUCER'S IN E-WELLS

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

### EXTRACTION WELL WEEKLY MONITORING DECEMBER 7, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
E-1	12:25	0	****	1,694,505,000	0	0	0	10063	***
E-2-1	12:14	0	****	783,401,000	0	0	0	10041	***
E-2-2	12:11	0	****	2,094,456,000	0	0	0	10036	***
E-3-1	10:43	0	****	1,538,775,000	0	0	0	9927	***
E-3-2	10:47	0	****	1,536,133,000	0	0	0	9928	***
E-4	10:01	0	****	1,575,672,000	0	0	0	9833	***
E-5	10:23	0	****	3,257,076,000	0	0	0	9838	***
E-6	10:07	0	****	2,079,104,000	0	0	0	10060	***
E- 8	10:17	0	****	921,164,000	0	0	0	9844	***
E-9	10:34	0	****	2,209,542,000	0	0	0	9879	3
E-10	10:29	0	****	3,069,704,000	0	0	0	9882	***
E-11	12:35	0	****	2,191,054,000	0	0	0	10081	***
E-12	13:20	0	148.45	164,193,000	0	0	0	10001	
E-13	11:03	0	****	2,377,825,000	67,000	158	0	9540	***
E-14	10:53	0	****	2,039,494,000	0	0	0	9946	***
E-15	12:19	0	****	2,450,310,000	0	0	0	10051	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>\*\*\*\*</sup> TRANDUCER'S IN E-WELLS

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

#### EXTRACTION WELL WEEKLY MONITORING DECEMBER 14, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
E-1	12:13	0	****	1,694,505,000	0	0	0	10068	***
E-2-1	11:57	0	****	783,401,000	0	0	0	10063	***
E-2-2	11:55	0	****	2,094,456,000	0	0	0	10064	***
E-3-1	11:25	0	****	1,538,775,000	0	0	0	10122	***
E-3-2	11:29	0	****	1,536,133,000	0	0	0	10122	***
E-4	10:56	0	****	1,575,672,000	0	0	0	10135	***
E-5	11:11	0	****	3,257,076,000	0	0	0	10128	***
E-6	11:00	0	****	2,079,104,000	0	0	0	10133	***
E- 8	11:08	0	****	921,164,000	0	0	0	10131	***
E-9	11:18	0	****	2,209,542,000	0	0	0	10124	3
E-10	11:15	0	****	3,069,704,000	0	0	0	10126	***
E-11	12:39	0	****	2,191,054,000	0	0	0	10084	***
E-12	12:56	0	148.40	164,193,000	0	0	0	0	***
E-13	11:47	0	****	2,377,838,000	13,000	124	0	10019	***
E-14	11:37	0	****	2,039,494,000	0	0	0	10124	***
E-15	12:02	0	****	2,450,310,000	0	0	0	10063	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>\*\*\*\*</sup> TRANDUCER'S IN E-WELLS

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

#### EXTRACTION WELL WEEKLY MONITORING DECEMBER 21, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
E-1	12:42	0	****	1,694,505,000	0	0	0	10109	***
E-2-1	11:09	0	****	783,401,000	0	0	0	10032	***
E-2-2	11:06	0	****	2,094,456,000	0	0	0	10031	***
E-3-1	10:56	0	****	1,538,775,000	0	0	0	10051	***
E-3-2	11:00	0	****	1,536,133,000	0	0	0	10051	***
E-4	11:35	0	****	1,575,672,000	0	0	0	10119	***
E-5	11:58	0	****	3,257,076,000	0	0	0	10127	***
E-6	11:42	0	****	2,079,104,000	0	0	0	10122	***
E- 8	11:52	0	****	921,164,000	0	0	0	10124	***
E-9	12:07	0	****	2,209,542,000	0	0	0	10129	3
E-10	12:04	0	****	3,069,704,000	0	0	0	10129	***
E-11	12:46	0	****	2,191,054,000	0	0	0	10087	***
E-12	13:11	0	148.42	164,193,000	0	0	0	0	***
E-13	11:21	0	****	2,377,844,000	6,000	107	0	9998	***
E-14	10:43	0	****	2,039,494,000	0	0	0	10026	***
E-15	11:15	0	****	2,450,310,000	0	0	0	10033	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>\*\*\*\*</sup> TRANDUCER'S IN E-WELLS

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

#### EXTRACTION WELL WEEKLY MONITORING DECEMBER 28, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
E-1	12:23	0	****	1,694,505,000	0	0	0	10061	***
E-2-1	12:03	0	****	783,401,000	0	0	0	10134	***
E-2-2	12:06	0	****	2,094,456,000	0	0	0	10140	***
E-3-1	11:40	0	****	1,538,775,000	0	0	0	10124	***
E-3-2	11:43	0	****	1,536,133,000	0	0	0	10123	***
E-4	11:09	0	****	1,575,672,000	0	0	0	10106	***
E-5	11:23	0	****	3,257,076,000	0	0	0	10045	***
E-6	11:13	0	****	2,079,104,000	0	0	0	10051	***
E-8	11:20	0	****	921,164,000	0	0	0	10048	***
E-9	11:31	0	****	2,209,542,000	0	0	0	10044	3
E-10	11:28	0	****	3,069,704,000	0	0	0	10044	***
E-11	12:44	0	***	2,191,054,000	0	0	0	10078	***
E-12	12:51	0	148.44	164,193,000	0	0	0	0	
E-13	11:58	0	****	2,377,850,000	6,000	118	0	10117	***
E-14	11:50	0	****	2,039,494,000	0	0	0	10147	***
E-15	12:11	0	****	2,450,310,000	0	0	0	10136	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>\*\*\*\*</sup> TRANDUCER'S IN E-WELLS

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

#### EXTRACTION WELL WEEKLY MONITORING JANUARY 4, 2005

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME*	REASON DOWN
E-1	13:58	0	***	1,694,505,000	О	0	0	10175	****
E-2-1	10:42	0	***	783,401,000	0	0	0	9999	****
E-2-2	10:39	0	***	2,094,456,000	0	0	0		****
E-3-1	10:31	0	***	1,538,775,000	0	0		9993	
E-3-2	10:35	0	***	1,536,133,000	. 0		0	10011	****
E-4	11:08	0	***	1,575,672,000	0	0	0	10012	****
E-5	11:23	0	***	3,257,076,000		0	0	10079	****
E-6	11:12	0	***		0	0	0	10080	****
E-8	11:19	0	***	2,079,104,000	0	0	0	10079	****
E-9	11:31		***	921,164,000	0	0	0	10079	***
E-10		0	***	2,209,542,000	0	0	0	10080	3
	11:28	0		3,069,704,000	0	0	0	10080	***
E-11	13:54	0	***	2,191,054,000	0	0	0	10150	***
E-12	13:40	0	148.42	164,193,000	0	0	0	10129	
E-13	11:02	0	***	2,377,856,000	6,000	111	0	9970	***
E-14	10:23	0	***	2,039,494,000	0	0	0	9993	***
E-15	10:48	0	***	2,450,310,000	0	0	0	9997	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup> DOWNTIME IN MINUTES

<sup>\*\*\*</sup> TRANSDUCERS IN E-WELLS

<sup>\*\*\*\*</sup> WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

#### APPENDIX B

# WEEKLY INJECTION WELL MONITORING

**Weeks of 7 July 2004 – 4 January 2005** 

## INJECTION WELL WEEKLY MONITORING JULY 7, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVE. GPM	PRESSURE	DOWNTIME**	REASON DOWN
I-1	15:13	0		375,995,000	0	0	0/0	76	3
I-2	16:11	0	0.00	398,161,000	0	0	0/0	76	3
I-3	16:08	410	0.00	199,820,000	3,949,000	383	0/0	76	3
1-4	16:05	400	0.00	2,921,359,000	3,774,000	366	0/0	76	3
I-5	16:01	560	0.00	24,191,000	5,770,000	560	0/0	76	3
I-6	15:58	270	15.36	11,137,000	2,758,000	268	18/18	76	3
1-7	15:44	650	61.52	5,252,316,000	7,542,000	732	0/0	76	3
I-8	15:47	410	0.00	2,507,331,000	3,754,000	364	0/0	76	3
I-9	15:50	300	0.00	3,070,773,000	2,935,000	285	0/0	76	3
I-10	15:53	540	0.00	3,209,774,000	4,933,000	479	0/0	76	3
I-11	15:23	120	133.55	2,103,898,000	313,000	30	4/0	76	3
I-12	15:29	0	0.00	1,435,459,000	0	0	0/0	76	3
I-13	15:32	0	206.02	936,119,000	0	0	0/0	76	3

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

## INJECTION WELL WEEKLY MONITORING JULY 14, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVE. GPM	PRESSURE	DOWNTIME**	REASON DOWN
I-1	11:38	0		375,995,000	0	0	0/0	111	1
I-2	11:09	0	0.00	398,161,000	0	0	0/0	111	1
I-3	11:07	400	0.00	203,527,000	3,707,000	383	0/0	111	1
1-4	11:04	370	0.00	2,924,867,000	3,508,000	363	0/0	111	1
I-5	11:01	560	0.00	29,543,000	5,352,000	554	2/3	111	1
I-6	10:58	260	19.54	13,703,000	2,566,000	265	17/18	111	1
I-7	10:45	800	58.27	5,259,131,000	6,815,000	705	0/0	111	1
I-8	10:49	430	0.00	2,510,988,000	3,657,000	378	0/0	111	1
I-9	10:52	320	0.00	3,073,592,000	2,819,000	291	0/0	111	1
I-10	10:54	520	0.00	3,214,476,000	4,702,000	486	0/0	111	1
I-11	10:32	0	158.81	2,104,174,000	276,000	29	0/0	111	1
I-12	10:29	0	0.00	1,435,459,000	0	0	0/0	111	1
I-13	10:26	0	207.08	936,119,000	0	0	0/0	111	1

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

## INJECTION WELL WEEKLY MONITORING JULY 22, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVE. GPM	PRESSURE	DOWNTIME**	REASON DOWN
I-1	11:17	0		375,995,000	0	0	0/0	85	1
I-2	14:35	0	0.00	398,161,000	0	0	0/0	85	1
I-3	14:31	400	0.00	208,097,000	4,570,000	393	0/0	85	1
I-4	14:28	390	0.00	2,929,160,000	4,293,000	369	0/0	85	1
I-5	14:24	550	0.00	36,087,000	6,544,000	562	2/2	85	1
I-6	14:21	260	18.91	16,827,000	3,124,000	268	18/18	85	1
I-7	12:26	900	31.21	5,268,484,000	9,353,000	811	0/0	85	1
I-8	14:10	450	0.00	2,515,648,000	4,660,000	400	0/0	85	1
I-9	14:13	400	0.00	3,077,688,000	4,096,000	352	5/2	85	1
I-10	14:16	540	0.00	3,220,205,000	5,729,000	492	0/0	85	1
I-11	11:30	0	154.75	2,104,654,000	480,000	42	0/0	85	1
I-12	11:37	0	0.00	1,435,459,000	0	0	0/0	85	1
I-13	11:41	0	208.10	936,119,000	0	0	0/0	85	1

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

## INJECTION WELL WEEKLY MONITORING JULY 27, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
<u> </u>	12:15	0		375,995,000	0	0	0/0	0	
I-2	11:44	0	0.00	398,161,000	0	0	0/0	0	
I-3	11:41	420	0.00	210,943,000	2,846,000	405	0/0	0	
I-4	11:36	400	0.00	2,931,816,000	2,656,000	378	0/0	0	
I-5	11:32	570	0.00	40,095,000	4,008,000	570	0/0	0	
I-6	11:26	270	17.84	18,724,000	1,897,000	270	18/19	0	
1-7	11:03	1000	31.74	5,275,011,000	6,527,000	917	0/0	0	
I-8	11:09	450	0.00	2,518,516,000	2,868,000	409	5/5	0	
I-9	11:14	570	0.00	3,081,119,000	3,431,000	489	11/7	0	
I-10	11:20	600	0.00	3,223,963,000	3,758,000	535	7/5	0	
I-11	10:47	140	124.18	2,105,350,000	696,000	97	6/0	0	
I-12	10:43	0	0.00	1,435,459,000	0	0	0/0	0	
I-13	10:05	0	207.17	936,119,000	0	0	0/0	0	

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

## INJECTION WELL WEEKLY MONITORING AUGUST 06, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVE. GPM	PRESSURE	DOWNTIME**	REASON DOWN
<u>l-1</u>	11:46	0		375,995,000	0	0	0/0	0	
I-2	13:20	0	203.98	398,161,000	0	0	0/0	0	
I-3	13:14	430	51.15	216,786,000	5,843,000	403	0/0	0	
I-4	13:08	400	45.76	2,937,247,000	5,431,000	375	0/2	0	
I-5	13:03	580	18.21	48,331,000	8,236,000	568	2/4	0	
I-6	12:56	270	17.58	22,634,000	3,910,000	270	19/20	0	
I-7	12:28	1000	28.83	5,288,488,000	13,477,000	930	3/2	0	
I-8	12:33	440	1.00	2,524,254,000	5,738,000	396	6/6	0	
I-9	12:41	560	13.87	3,088,449,000	7,330,000	506	11/7	0	
I-10	12:45	570	1.31	3,231,708,000	7,745,000	535	7/5	0	
I-11	12:07	100	132.13	2,106,596,000	1,246,000	86	6/0	0	
I-12	11:58	0	DRY	1,435,459,000	0	0	0/0	0	
I-13	11:53	0	207.56	936,119,000	0	0	0/0	0	

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

## INJECTION WELL WEEKLY MONITORING AUGUST 12, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVE. GPM	PRESSURE	DOWNTIME**	REASON DOWN
I-1	12:33	0		375,995,000	0	0	0/0	3890	1,***
I-2	14:13	0	204.11	398,161,000	0	0	0/0	3890	1,***
I-3	14:08	0	211.90	219,020,000	2,234,000	465	0/0	3890	1,***
1-4	14:01	0	178.86	2,939,341,000	2,094,000	436	0/0	3890	1.***
I-5	13:56	0	135.52	51,543,000	3,212,000	669	0/0	3890	1,***
I-6	13:51	0	135.30	24,160,000	1,526,000	318	0/0	3890	1,***
I-7	13:14	0	116.30	5,293,409,000	4,921,000	1026	0/0	3890	<u>';</u> 1,***
I-8	13:19	0	122.46	2,526,380,000	2,126,000	443	0/0	3890	1,***
I-9	13:26	0	122.23	3,091,144,000	2,695,000	562	0/0	3890	1,***
I-10	13:31	0	134.64	3,234,488,000	2,780,000	580	0/0	3890	1,***
I-11	12:55	0	159.76	2,107,248,000	652,000	136	0/0	3890	1,***
I-12	12:47	0	333.96	1,435,459,000	0	0	0/0	3890	1,***
I-13	12:43	0	207.69	936,119,000	0	0	0/0	3890	1,***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

## INJECTION WELL WEEKLY MONITORING AUGUST 17, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSUR	DOWNTIME**	REASON DOWN
<u> </u>	12:50	0		375,995,000	0	0	0/0	7200	***
I-2	13:46	0	204.16	398,161,000	0	0	0/0	7200	***
I-3	13:40	0	176.62	219,020,000	0	0	0/0	7200	***
1-4	13:34	0	160.26	2,939,341,000	0	0	0/0	7200	***
I-5	13:30	0	136.41	51,543,000	0	0	0/0	7200	***
I-6	13:26	0	125.82	24,160,000	0	0	0/0	7200	***
I-7	13:09	0	116.23	5,293,409,000	0	0	0/0	7200	***
I-8	13:13	0	122.37	2,526,380,000	0	0	0/0	7200	***
I-9	13:17	0	122.35	3,091,144,000	0	0	0/0	7200	***
I-10	13:21	0	134.51	3,234,488,000	0	0	0/0	7200	***
I-11	13:53	0	160.18	2,107,248,000	0	0	0/0	7200	***
I-12	13:58	0	286.74	1,435,459,000	0	0	0/0	7200	***
I-13	14:10	0	207.48	936,119,000	0	0	0/0	7200	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

## INJECTION WELL WEEKLY MONITORING AUGUST 24, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVE. GPM	PRESSURE	DOWNTIME**	REASON DOWN
<u>I-1</u>	10:42	0		375,995,000	0	0	0/0	10080	***
I-2	11:52	0	204.18	398,161,000	0	0	0/0	10080	***
I-3	11:58	0	176.81	219,020,000	0	0	0/0	10080	***
I-4	12:03	0	160.69	2,939,341,000	0	0	0/0	10080	***
I-5	12:09	0	137.14	51,543,000	0	0	0/0	10080	***
I-6	12:14	0	126.34	24,160,000	0	0	0/0	10080	***
I-7	11:17	0	116.03	5,293,409,000	0	0	0/0	10080	***
I-8	11:26	0	122.97	2,526,380,000	0	0	0/0	10080	***
<b>I</b> -9	11:34	0	122.65	3,091,144,000	0	0	0/0	10080	***
I-10	11:39	0	134.58	3,234,488,000	0	0	0/0	10080	***
I-11	13:00	0	160.29	2,107,248,000	0	0	0/0	10080	***
I-12	13:06	0		1,435,459,000	0	0	0/0	10080	***
I-13	13:23	0	207.09	936,119,000	0	0	0/0	10080	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup>WELLOFFLINE FOR SYSTEM NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

## INJECTION WELL WEEKLY MONITORING SEPTEMBER 3, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVE. GPM	PRESSURE	DOWNTIME**	REASON DOWN
I-1	15:33	0		375,995,000	0	0	0/0	14400	***
I-2	16:00	80	204.25	398,161,000	0	0	0/0	14400	***
I-3	16:12	550		219,020,000	0	0	0/0	14400	***
1-4	16:20	500	161.10	2,939,341,000	0	0	0/0	14400	***
I-5	16:24	910	137.90	51,543,000	0	0	0/0	14400	***
I-6	16:29	390	126.82	24,160,000	0	0	0/0	14400	***
1-7	16:40	1180	116.30	5,293,409,000	0	0	0/0	14400	***
I-8	16:44	600	123.34	2,526,380,000	0	0	0/0	14400	***
I-9	16:47	750	122.78	3,091,144,000	0	0	0/0	14400	***
I-10	16:53	700	134.71	3,234,488,000	0	0	0/0	14400	***
I-11	15:49	410	160.60	2,107,248,000	0	0	0/0	14400	***
I-12	15:46	410		1,435,459,000	0	0	0/0	14400	***
I-13	15:41	250	208.30	936,119,000	0	0	0/0	14400	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup>WELLOFFLINE FOR SYSTEM NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

## INJECTION WELL WEEKLY MONITORING SEPTEMBER 08, 2004

WELL	TIME	GPM	*LEVE	GALLONS TO DATE	WEEK'S TOTAL	AVE. GPM	PRESSURE	DOWNTIME**	REASON DOWN
I-1	12:14	0		375,995,000	0	0	0/0	5760	***
I-2	12:29	0	204.21	398,161,000	0	0	0/0	5760	***
I-3	12:34	0	176.94	219,020,000	0	0	0/0	5760	***
I-4	12:38	0	161.12	2,939,341,000	0	0	0/0	5760	***
I-5	12:43	0	138.00	51,543,000	0	0	0/0	5760	***
I-6	12:47	0	126.90	24,160,000	0	0	0/0	5760	***
I-7	12:51	0	116.18	5,293,409,000	0	0	0/0	5760	***
I-8	12:55	0	123.07	2,526,380,000	0	0	0/0	5760	***
I-9	12:59	0	122.37	3,091,144,000	0	0	0/0	5760	***
I-10	13:05	0	134.62	3,234,488,000	0	0	0/0	5760	***
I-11	13:20	0	160.66	2,107,248,000	0	0	0/0	5760	***
I-12	13:24	0		1,435,459,000	0	0	0/0	5760	***
I-13	13:27	0	208.38	936,119,000	0	0	0/0	5760	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup>WELLOFFLINE FOR SYSTEM NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

## INJECTION WELL WEEKLY MONITORING SEPTEMBER 14, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVG GPM	PRESSURE	DOWNTIME**	REASON DOWN
<u>I-1</u>	10:41	0		375,995,000	0	0	0/0	8640	***
I-2	12:01	0	204.35	398,161,000	0	0	0/0	8640	***
I-3	12:07	0	177.10	219,020,000	0	0	0/0	8640	***
I-4	12:12	0	161.40	2,939,341,000	0	0	0/0	8640	***
I-5	12:17	0	138.22	51,543,000	0	0	0/0	8640	***
I-6	12:22	0	127.20	24,160,000	0	0	0/0	8640	***
I-7	12:27	0	116.31	5,293,409,000	0	0	0/0	8640	***
I-8	12:32	0	123.18	2,526,380,000	0	0	0/0	8640	***
I-9	12:35	0	122.58	3,091,144,000	0	0	0/0	8640	***
I-10	12:41	0	134.74	3,234,488,000	0	0	0/0	8640	***
I-11	10:48	0	160.85	2,107,248,000	0	0	0/0	8640	***
I-12	10:56	0		1,435,459,000	0	0	0/0	8640	***
I-13	10:59	0	208.60	936,119,000	0	0	0/0	8640	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup>WELLOFFLINE FOR SYSTEM NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

## INJECTION WELL WEEKLY MONITORING SEPTEMBER 23, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVE. GPM	PRESSUR	DOWNTIME**	REASON DOWN
l-1	11:15	0		375,995,000	0	0	0/0	12960	***
I-2	14:04	0	204.52	398,161,000	0	0	0/0	12960	***
I-3	12:08	0	177.24	219,020,000	0	0	0/0	12960	***
1-4	12:03	0	161.54	2,939,341,000	0	0	0/0	12960	***
I-5	11:59	0	138.27	51,543,000	0	0	0/0	12960	***
I-6	11:55	0	127.42	24,160,000	0	0	0/0	12960	***
I-7	11:34	0	116.98	5,293,409,000	0	0	0/0	12960	***
I-8	11:37	0	123.57	2,526,380,000	0	0	0/0	12960	***
I-9	11:41	0	213.16	3,091,144,000	0	0	0/0	12960	***
I-10	11:48	0	134.57	3,234,488,000	0	0	0/0	12960	***
I-11	12:20	0	160.78	2,107,248,000	0	0	0/0	12960	***
I-12	12:24	0		1,435,459,000	0	0	0/0	12960	***
I-13	13:53	0	208.69	936,119,000	0	0	0/0	12960	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup>WELLOFFLINE FOR SYSTEM NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

## INJECTION WELL WEEKLY MONITORING SEPTEMBER 30, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVE. GPM	PRESSURE	DOWNTIME**	REASON DOWN
I-1	18:11	0		375,995,000	0	0	0/0	4958	***
I-2	16:08	0	204.30	398,161,000	0	0	0/0	4958	***
I-3	16:20	0	177.07	219,020,000	0	0	0/0	4958	***
l-4	16:29	0	161.38	2,939,341,000	0	0	0/0	4958	***
I-5	16:36	0	138.64	51,669,000	126,000	23	0/0	4958	***
I-6	16:44	25	114.09	24,653,000	493,000	91	0/0	4958	***
1-7	17:01	90	107.34	5,293,874,000	465,000	85	0/0	4958	***
I-8	17:23	0	123.47	2,526,387,000	7,000	1	0/0	4958	***
I-9	17:30	150	87.34	3,091,844,000	700,000	128	0/0	4958	***
I-10	17:38	480	24.29	3,236,552,000	2,064,000	377	0/0	4958	***
<u> -11</u>	14:38	0	160.87	2,107,248,000	0	0	0/0	4958	***
I-12	14:07	0		1,435,459,000	0	0	0/0	4958	***
I-13	13:58	0	208.50	936,119,000	0	0	0/0	4958	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup>WELLOFFLINE FOR SYSTEM NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

# INJECTION WELL WEEKLY MONITORING OCTOBER 6, 2004

WELL	TIME	GPM	*LEVE	GALLONS TO DATE	WEEK'S TOTAL	AVE. GPM	PRESSUR	DOWNTIME**	REASON DOWN
I-1	12:15	0		375,995,000	0	0	0/0	8124	***
I-2	13:31	0	204.16	398,161,000	0	0	0/0	8124	***
I-3	13:26	0	176.98	219,020,000	0	0	0/0	8124	***
I-4	13:20	0	161.30	2,939,341,000	0	0	0/0	8124	***
I-5	13:15	0	138.31	51,675,000	6,000	19	0/0	8124	***
I-6	13:11	0	127.47	24,753,000	100,000	330	0/0	8124	***
I-7	12:48	0	116.42	5,293,976,000	102,000	388	0/0	8124	***
I-8	12:53	0	123.20	2,526,390,000	3,000	12	0/0	8124	***
I-9	12:58	0	122.96	3,092,003,000	159,000	359	0/0	8124	***
I-10	13:03	0	134.18	3,236,964,000	412,000	480	0/0	8124	***
I-11	12:33	0	161.15	2,107,248,000	0	0	0/0	8124	***
I-12	12:31	0		1,435,459,000	0	0	0/0	8124	***
I-13	12:27	0	208.76	936,119,000	0	0	0/0	8124	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup>WELLOFFLINE FOR SYSTEM NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

# INJECTION WELL WEEKLY MONITORING OCTOBER 12, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVE. GPM	PRESSURE	DOWNTIME**	REASON DOWN
<u> </u>	12:09	0		375,995,000	0	0	0/0	8640	***
I-2	13:32	0	204.28	398,161,000	0	0	0/0	8640	***
I-3	13:26	0	177.10	219,020,000	0	0	0/0	8640	***
I-4	13:21	0	161.40	2,939,341,000	0	0	0/0	8640	***
I-5	13:17	0	138.56	51,675,000	0	0	0/0	8640	***
I-6	13:12	0	127.52	24,753,000	0	0	0/0	8640	***
I-7	12:49	0	116.51	5,293,976,000	0	0	0/0	8640	***
I-8	12:54	0	123.25	2,526,390,000	0	0	0/0	8640	***
I-9	12:58	0	122.72	3,092,003,000	0	0	0/0	8640	***
I-10	13:03	0	134.81	3,236,964,000	0	0	0/0	8640	***
I-11	12:16	0	160.92	2,107,248,000	0	0	0/0	8640	***
I-12	12:21	0	0.00	1,435,459,000	0	0	0/0	8640	***
I-13	12:24	0	208.67	936,119,000	0	0	0/0	8640	***

<sup>\*</sup> DEPTH TO WATER (BTC)

(3) CORRECTIVE MAINTENANCE

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup>WELLOFFLINE FOR SYSTEM NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

# INJECTION WELL WEEKLY MONITORING OCTOBER 20, 2004

WELL	TIME	GPM	*LEVE	GALLONS TO DATE	WEEK'S TOTAL	AVE. GPM	PRESSURE	DOWNTIME**	REASON DOWN
I-1	13:21	0		375,995,000	0	0	0/0	11520	***
I-2	15:30	0	204.27	398,161,000	0	0	0/0	11520	***
I-3	15:22	0	177.30	219,020,000	0	0	0/0	11520	***
1-4	15:15	0	161.68	2,939,341,000	0	0	0/0	11520	***
I-5	15:10	0	139.00	51,675,000	0	0	0/0	11520	***
I-6	15:02	0	127.26	24,753,000	0	0	0/0	11520	***
I-7	14:30	0	116.36	5,293,976,000	0	0	0/0	11520	***
I-8	14:35	0	123.38	2,526,390,000	0	0	0/0	11520	***
I-9	14:40	0	123.86	3,092,003,000	0	0	0/0	11520	***
I-10	14:46	0	134.91	3,236,964,000	0	0	0/0	11520	***
I-11	13:35	0	161.16	2,107,248,000	0	0	0/0	11520	***
I-12	13:43	0		1,435,459,000	0	0	0/0	11520	***
I-13	13:46	0	208.71	936,119,000	0	0	0/0	11520	***

<sup>\*</sup> DEPTH TO WATER (BTC)

(3) CORRECTIVE MAINTENANCE

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup>WELLOFFLINE FOR SYSTEM NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

### INJECTION WELL WEEKLY MONITORING OCTOBER 26, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVE. GPM	PRESSURE	DOWNTIME**	REASON DOWN
I-1	12:23	0		375,995,000	0	0	0/0	8640	***
1-2	14:24	0	204.21	398,161,000	0	0	0/0	8640	***
1-3	14:30	0	177.26	219,020,000	0	0	0/0	8640	***
I-4	14:35	0	161.58	2,939,341,000	0	0	0/0	8640	***
I-5	14:39	0	138.56	51,675,000	0	0	0/0	8640	***
I-6	14:43	0	127.32	24,753,000	0	0	0/0	8640	***
I-7	14:56	0	116.42	5,293,976,000	0	0	0/0	8640	***
I-8	15:00	0	123.28	2,526,390,000	0	0	0/0	8640	***
I-9	15:04	0	123.72	3,092,003,000	0	0	0/0	8640	***
I-10	15:09	0	134.86	3,236,964,000	0	0	0/0	8640	***
I-11	12:33	0	161.05	2,107,248,000	0	0	0/0	8640	***
I-12	12:40	0		1,435,459,000	0	0	0/0	8640	***
I-13	12:45	0	208.68	936,119,000	0	0	0/0	8640	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup>WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

### INJECTION WELL WEEKLY MONITORING NOVEMBER 2, 2004

WELL	TIME	GPM	*LEVE	GALLONS TO DATE	WEEK'S TOTAL	AVE. GPM	PRESSURE	DOWNTIME**	REASON DOWN
I-1	10:57	0		375,995,000	0	0	0/0	10080	***
I-2	12:24	0	204.49	398,161,000	0	0	0/0	10080	***
I-3	12:20	0	177.26	219,020,000	0	0	0/0	10080	***
1-4	12:15	0	161.67	2,939,341,000	0	0	0/0	10080	***
I-5	12:11	0	138.96	51,675,000	0	0	0/0	10080	***
I-6	12:07	0	127.66	24,753,000	0	0	0/0	10080	***
I-7	11:47	0	116.42	5,293,976,000	0	0	0/0	10080	***
I-8	11:52	0	124.09	2,526,390,000	0	0	0/0	10080	***
I-9	11:56	0	123.58	3,092,003,000	0	0	0/0	10080	***
I-10	12:00	0	135.05	3,236,964,000	0	0	0/0	10080	***
I-11	11:23	0	161.56	2,107,248,000	0	0	0/0	10080	***
I-12	11:18	0		1,435,459,000	0	0	0/0	10080	***
I-13	11:12	0	209.29	936,119,000	0	0	0/0	10080	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup>WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

### INJECTION WELL WEEKLY MONITORING NOVEMBER 9, 2004

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVE. GPM	PRESSURE	DOWNTIME**	REASON DOWN
I-1	12:24	0		375,995,000	0	0	0/0	7893	***
I-2	14:27	0	204.47	398,161,000	0	0	0/0	7893	***
I-3	14:20	0	177.23	219,020,000	0	0	0/0	7893	***
I-4	14:13	0	161.64	2,939,341,000	0	0	0/0	7893	***
I-5	14:06	0	137.02	51,684,000	9,000	4	0/0	7893	***
I-6	13:57	120	85.91	24,922,000	169,000	74	1/2	7893	***
I-7	13:18	90	111.04	5,294,123,000	147,000	65	0/0	7893	***
I-8	13:27	0	120.82	2,526,394,000	4,000	2	0/0	7893	***
I-9	13:36	160	79.17	3,092,253,000	250,000	109	0/0	7893	***
I-10	13:45	460	21.47	3,237,618,000	654,000	285	0/0	7893	***
I-11	12:55	0	160.89	2,107,248,000	0	0	0/0	7893	***
I-12	12:46	0		1,435,459,000	0	0	0/0	7893	***
I-13	12:36	0	208.03	936,119,000	0	0	0/0	7893	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup>WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

# INJECTION WELL WEEKLY MONITORING NOVEMBER 15, 2004

WELL	TIME	GPM	*LEVE	GALLONS TO DATE	WEEK'S TOTAL	AVE. GPM	PRESSURE	DOWNTIME**	REASON DOWN
I-1	13:06	0		375,995,000	0	0	0/0	5174	***
I-2	14:22	0	204.28	398,161,000	0	0	0/0	5174	***
I-3	14:18	0	177.36	219,020,000	0	0	0/0	5174	***
I-4	14:13	0	161.74	2,939,341,000	0	0	0/0	5174	***
I-5	14:09	0	138.52	51,686,000	2,000	1	0/0	5174	***
I-6	14:04	0	127.31	25,403,000	481,000	138	0/0	5174	***
I-7	13:42	0	116.28	5,294,612,000	489,000	140	0/0	5174	***
I-8	13:48	0	123.81	2,526,411,000	17,000	5	0/0	5174	***
I-9	13:52	0	123.37	3,092,976,000	723,000	208	0/0	5174	***
I-10	13:57	0	135.09	3,239,380,000	1,762,000	507	0/0	5174	***
I-11	13:23	0	161.18	2,107,248,000	0	0	0/0	5174	***
I-12	13:20	0		1,435,459,000	0	0	0/0	5174	***
I-13	13:15	0	209.02	936,119,000	0	0	0/0	5174	***

<sup>\*</sup> DEPTH TO WATER (BTC)

(3) CORRECTIVE MAINTENANCE

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup>WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

### INJECTION WELL WEEKLY MONITORING NOVEMBER 23, 2004

WELL	TIME	GPM	*LEVE	GALLONS TO DAT	WEEK'S TOTAL	AVE. GPM	PRESSUR	DOWNTIME**	REASON DOWN
I-1	12:35	0		375,995,000	0	0	0/0	11520	***
I-2	14:11	0	204.23	398,161,000	0	0	0/0	11520	***
I-3	14:06	0	177.25	219,020,000	0	0	0/0	11520	***
1-4	14:15	0	161.62	2,939,341,000	0	0	0/0	11520	***
I-5	14:20	0	139.13	51,686,000	0	0	0/0	11520	***
I-6	14:24	0	127.50	25,403,000	0	0	0/0	11520	***
1-7	13:23	0	116.28	5,294,612,000	0	0	0/0	11520	***
I-8	14:30	0	123.77	2,526,411,000	0	0	0/0	11520	***
I-9	14:34	0	123.30	3,092,976,000	0	0	0/0	11520	***
I-10	14:38	0	135.00	3,239,380,000	0	0	0/0	11520	***
I-11	12:58	0	161.21	2,107,248,000	0	0	0/0	11520	***
I-12	12:52	0	•	1,435,459,000	0	0	0/0	11520	***
I-13	12:46	0	208.93	936,119,000	0	0	0/0	11520	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup>WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

# INJECTION WELL WEEKLY MONITORING NOVEMBER 30, 2004

WELL	TIME	GPM	*LEVE	GALLONS TO DATE	WEEK'S TOTAL	AVE. GPM	PRESSURE	DOWNTIME**	REASON DOWN
I-1	12:38	0		375,995,000	0	0	0/0	10080	***
I-2	11:21	0	204.31	398,161,000	0	0	0/0	10080	***
I-3	11:26	0	177.24	219,020,000	0	0	0/0	10080	***
I-4	11:31	0	161.68	2,939,341,000	0	0	0/0	10080	***
I-5	11:36	0	139.04	51,686,000	0	0	0/0	10080	***
I-6	11:40	0	127.44	25,403,000	0	0	0/0	10080	***
I-7	11:45	0	116.37	5,294,612,000	0	0	0/0	10080	***
I-8	11:50	0	123.47	2,526,411,000	0	0	0/0	10080	***
I-9	11:54	0	123.84	3,092,976,000	0	0	0/0	10080	***
I-10	12:00	0	135.12	3,239,380,000	0	0	0/0	10080	***
I-11	12:16	0	161.14	2,107,248,000	0	0	0/0	10080	***
I-12	12:23	0		1,435,459,000	0	0	0/0	10080	***
I-13	12:26	0	209.02	936,119,000	. 0	0	0/0	10080	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup>WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

#### INJECTION WELL WEEKLY MONITORING **DECEMBER 7, 2004**

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVE. GPM	PRESSURE	DOWNTIME**	REASON DOWN
I-1	12:28	0		375,995,000	0	0	0/0	10080	***
I-2	14:07	0	203.98	398,161,000	0	0	0/0	10080	***
I-3	14:03	0	177.20	219,020,000	0	0	0/0	10080	***
1-4	13:58	0	161.52	2,939,341,000	0	0	0/0	10080	***
I-5	13:52	0	139.15	51,686,000	0	0	0/0	10080	***
I-6	13:47	0	127.31	25,403,000	0	0	0/0	10080	***
I-7	13:43	0	116.43	5,294,612,000	. 0	0	0/0	10080	***
I-8	13:38	0	123.50	2,526,411,000	· 0	0	0/0	10080	***
I-9	13:34	0	123.72	3,092,976,000	0	0	0/0	10080	***
I-10	13:29	0	135.10	3,239,380,000	0	0	0/0	10080	***
I-11	12:56	0	161.02	2,107,248,000	0	0	0/0	10080	***
I-12	12:51	0		1,435,459,000	0	0	0/0	10080	***
I-13	12:44	0	208.95	936,119,000	0	0	0/0	10080	***
* DEPTH TO WATE	R (BTC)				(1) DOWED ELLICTUATION			10000	

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup>WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

#### INJECTION WELL WEEKLY MONITORING **DECEMBER 14, 2004**

WELL	TIME	GPM	*LEVE	GALLONS TO DATE	WEEK'S TOTAL	AVE. GPM	PRESSUR	DOWNTIME**	REASON DOWN
I-1	12:10	0		375,995,000	0	0	0/0	10080	***
I-2	13:05	0	204.31	398,161,000	0	0	0/0	10080	***
I-3	13:11	0	177.46	219,020,000	0	0	0/0	10080	***
I-4	13:16	0	161.48	2,939,341,000	0	0	0/0	10080	***
I-5	13:22	0	139.02	51,686,000	0	0	0/0	10080	***
I-6	13:28	0	127.18	25,403,000	0	0	0/0	10080	***
I-7	13:34	0	116.38	5,294,612,000	0	0	0/0	10080	***
I-8	13:40	0	123.42	2,526,411,000	0	0	0/0	10080	***
1-9	13:46	0	123.69	3,092,976,000	0	0	0/0	10080	***
I-10	13:51	0	134.92	3,239,380,000	0	0	0/0	10080	***
I-11	12:31	0	161.26	2,107,248,000	0	0	0/0	10080	***
I-12	12:26	0		1,435,459,000	0	0	0/0	10080	***
I-13	12:19	0	209.02	936,119,000	0	0	0/0	10080	***
DEPTH TO WATE	R (BTC)		<u> </u>		(1) POWER FLUCTUATION	<del></del>	0/0	10000	

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup>WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

### INJECTION WELL WEEKLY MONITORING **DECEMBER 21, 2004**

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVE. GPM	PRESSURE	DOWNTIME**	REASON DOWN
I-1	12:36	0		375,995,000	0	0	0/0	10080	***
I-2	14:11	0	204.23	398,161,000	0	0	0/0	10080	***
I-3	14:05	0	177.38	219,020,000	0	0	0/0	10080	***
1-4	13:58	0	161.50	2,939,341,000	0	0	0/0	10080	***
I-5	13:40	0	139.03	51,686,000	0	0	0/0	10080	***
I-6	13:37	0	127.21	25,403,000	0	0	0/0		***
I-7	13:33	0	116.40	5,294,612,000	0	0	0/0	10080	***
I-8	13:28	0	123.52	2,526,411,000	0	0	0/0	10080	
I-9	13:24	0	123.75	3,092,976,000	0	0		10080	***
I-10	13:19	0	134.98	3,239,380,000	0		0/0	10080	***
I-11	13:04	0	161.30	2,107,248,000		0	0/0	10080	***
I-12	12:59	0	10 7.00		0	0	0/0	10080	***
				1,435,459,000	0	0	0/0	10080	***
I-13 DEPTH TO WATER	12:55	0	209.05	936,119,000	(1) POWER FLUCTUATION	0	0/0	10080	***

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup>WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

### INJECTION WELL WEEKLY MONITORING **DECEMBER 28, 2004**

WELL	TIME	GPM	*LEVEL	GALLONS TO DATE	WEEK'S TOTAL	AVE. GPM	PRESSURE	DOWNTIME**	REASON DOWN
I-1	12:20	0		375,995,000	0	0	0/0	10080	***
I-2	13:00	0	204.27	398,161,000	0	0	0/0	10080	***
1-3	13:05	0	177.26	219,020,000	0	0	0/0	10080	***
I-4	13:09	0	161.47	2,939,341,000	0	0	0/0	10080	***
I-5	13:15	0	139.08	51,686,000	0	0	0/0	10080	***
I-6	13:21	0	127.26	25,403,000	0	0	0/0	10080	***
I-7	13:26	0	116.36	5,294,612,000	0	0	0/0	10080	***
I-8	13:33	0	123.48	2,526,411,000	0	0	0/0	10080	***
I-9	13:38	0	123.71	3,092,976,000	0	0	0/0	10080	***
I-10	13:43	0	135.02	3,239,380,000	0	0	0/0		***
I-11	12:37	0	161.12	2,107,248,000	0	0	0/0	10080	***
I-12	12:34	0		1,435,459,000	0	0		10080	***
I-13	12:28	0	208.85	936,119,000	0	0	0/0	10080	
DEPTH TO WAT	ER (BTC)				(1) POWER ELLICTRATION	<u> </u>	0/0	10080	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup>DOWNTIME IN MINUTES

<sup>\*\*\*</sup>WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE

#### INJECTION WELL WEEKLY MONITORING **JANUARY 4, 2005**

WELL	TIME	GPM	LEVEL*	GALLONS TO DATE	WEEK'S TOTAL	AVE. GPM	PRESSURE	DOWNTIME**	REASON DOWN
I-1	14:03	0		375,995,000	0	0	0/0	10080	***
I-2	12:46	0	204.30	398,161,000	0	0	0/0	10080	***
I-3	12:50	0	177.29	219,020,000	0	0	0/0		***
1-4	12:55	0	161.48	2,939,341,000	0	0	0/0	10080	***
I-5	13:02	0	139.05	51,686,000	0	0	0/0	10080	
1-6	13:09	0	127.20	25,403,000	0	0		10080	***
1-7	13:15	0	116.41	5,294,612,000	0	0	0/0	10080	***
I-8	13:23	0	123.45	2,526,411,000	0		0/0	10080	***
I-9	13:27	0	123.73	3,092,976,000		0	0/0	10080	***
I-10	13:31	0	135.00	3,239,380,000	0	0	0/0	10080	***
I-11	14:16	0	161.21	·	0	0	0/0	10080	***
I-12			101.21	2,107,248,000	0	0	0/0	10080	***
	14:12	0		1,435,459,000	0	0	0/0	10080	***
I-13 * DEPTH TO WATER	14:07	0	208.92	936,119,000	0	0	0/0	10080	***

<sup>\*</sup> DEPTH TO WATER (BTC)

<sup>\*\*</sup> DOWNTIME IN MINUTES

<sup>\*\*\*</sup> WELL OFFLINE FOR SYSTEM NON OPERATION TEST

<sup>(1)</sup> POWER FLUCTUATION

<sup>(2)</sup> PREVENTATIVE MAINTENANCE

<sup>(3)</sup> CORRECTIVE MAINTENANCE